RAILROAD

50c | MAGAZINE

OCTOBER, 1960

Pacific type No. 2626, southbound from Aroostook to McAdam, N.B., was the last steam locomotive to pull main-line freight in the Canadian Pacific's Atlantic Region. David Plowden made this shot while standing waist- deep in Chamcook Lake near St. Andrews.

THE RAILWAY THAT CHOCOLATE BARS BUILT by Stephen D. Maguire

57 Save on either STEREO or REGULAR L.P.

GLENN MILLER

REGULAR L. P. ONLY*

NATIONALLY ADVERTISED PRICE **$14.98**

. . . if you agree to buy just four

★ **3 LONG-PLAYING RECORDS**
★ **EXCITING MILLER "FINDS"**
★ **DE LUXE LIBRARY CASE**

No matter what kind of Miller fan you are—from barely lukewarm to sizzling-hot—this is an offer you shouldn't pass up.

Here is some of the best work done by the band—carefully selected from 900 "air checks" of radio broadcasts from 1940 to 1942. You'll enjoy the rich sound in these numbers, never released before this album was issued.

This $14.98 collection is yours for only $2.00. It's your exciting introduction to The RCA VICTOR Popular Album Club. Here are some of the other advantages membership brings:

- You choose new albums for your collection without hustle or hurry—in the comfort of your own home.
- You enjoy the finest stereo or hi-fi music being

or ANY THREE below for

220. Best-seller from TV series. Composed, conducted by Henry (*Peter Gunn*) Mancini.

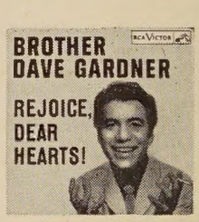
200. Perry's best "lazy-daddy" stylings of *Linda, St. Louis Blues, I've Got You Under My Skin*, etc.

215. Long-awaited new Pops recordings of the *Rhapsody*, plus *American in Paris*. Earl Wild, piano.

225. Harry with the Belafonte Folk Singers. 11 spirituals—moving, tender, rhythmic.

227. 13 Hawaiian and Polynesian hits recorded in Hawaii. Color photos of Hawaii, text by Michener.

212. Mr. Guitar's first dance album, already a best-seller! *Night Train, Sleep Walk, Hot Toddy*.



228. A best-seller! Hilarious beatnik-biblical phraseology in cornpone accents. *Monaural only.*

9. Operetta film stars remake their 12 biggest hits. *Indian Love Call, Rosalie, Wanting You.*

13. Dancing, listening delight. Sunny piano-with-rhythm medleys of fox trots, waltzes, lindys.

14. Fresh versions of 12 harmony hits: *Paper Doll, Love Is a Many-Splendored Thing*, etc.

15. Lilting versions of *The Blue Danube, Artists' Life, Emperor Waltz, Wiener Blut*, etc.

16. Key highlights from Tchaikovsky's enchanting ballet masterpiece. *Waltz of the Flowers*, etc.

1. Singing strings, soothing moods. *Autumn Leaves, Star Dust, By the Sleepy Lagoon*, etc.

2. Hottest album of year! All-star modern "mood" jazz from NBC-TV series. *Fallout!*, more.

58. Flowing, many-mooded guitar plus rich, warm strings. *Estrellita, The Three Bells*, etc.

19. Lush, rhythmic, exotic instrumentals. *Valencia, Granada, Delicado, Come Closer to Me.*

24. 12 pop favorites and light classics. *September Song, Warsaw Concerto, Diane, Tenderly*, more.

26. La MacKenzie sings 12 ballads. *Hey There, Ebb Tide, Too Young, Moonglow, Blue Tango.*

69. His biggest hits re-recorded in hi fi. *There, I've Said It Again; Riders in the Sky; Ballerina*; etc.

40. Wacky banjo-pickin' country comics fracture hit songs, special material. 12 laugh-getters.

48. Hilarious musical satire and caricature plus commentary by comedian Henry Morgan.

***IMPORTANT—PLEASE NOTE:** Although the Glenn Miller album is available only in regular L. P., you may get it and still join either the Stereo or the

through The RCA VICTOR Popular Album Club

MASTERPIECES - $2

additional popular albums from the Club within one year

recorded today by the top stars of RCA VICTOR.

- After purchasing four additional albums, you continue to save almost one-third of the manufacturer's nationally advertised price through the Club's Dividend Album This plan lets you choose a **free** album for every two you buy.

To join, simply fill in the membership coupon. Every month you'll receive the Club's magazine, which offers a wide variety of albums—up to 200 a year. One is singled out as the album-of-the-month. If you want it, it comes to you automatically. If you don't want it, you can order an alternate *or nothing at all* by using the simple form always provided. You pay only the nationally advertised price of $3.98 (at times $4.98) for regular L.P. and $4.98 (at times $5.98) for stereo, plus, in all cases, a small charge for postage and handling.

Enroll today with either this Glenn Miller three-record album *or* any three others listed below. Please be sure to check the Division—Stereo or Regular L.P.—in which you wish to be enrolled.

THE SONGS AND THE ARTISTS IN THIS MEMORABLE COLLECTION

BLUES IN THE NIGHT
Marion Hutton: Tex Beneke, The Modernaires
MY GAL SAL
YOU'RE A LUCKY GUY
Marion Hutton
WHEN SUMMER IS GONE
WABASH BLUES
SWEET AND LOW
I NEVER KNEW
LET'S ALL SING TOGETHER
Marion Hutton
THINKING OF YOU
ALICE BLUE GOWN
HALLELUJAH!
SARONG
NICKEL SERENADE
Marion Hutton, Tex Beneke, The Modernaires
WHISPERING
OOH! WHAT YOU SAID
Marion Hutton
DIPSY DOODLE
BIRTH OF THE BLUES
ROCKIN' CHAIR
Tex Beneke
SWEET LEILANI
YESTERTHOUGHTS
Ray Eberle
SMOKE RINGS
T'AINT NO USE AT ALL
GOODNIGHT SWEETHEART
I'M STEPPING OUT
WITH A MEMORY TONIGHT
Ray Eberle
WHEN MY BABY SMILES AT ME
THE BLUES SERENADE
SILVER THREADS AMONG THE GOLD
A LOVE SONG HASN'T BEEN SUNG
Ray Eberle
SOME OF THESE DAYS
MEMPHIS BLUES
DIG IT
Marion Hutton, Tex Beneke
WALKING BY THE RIVER
Ray Eberle, The Modernaires
WHEN IRISH EYES ARE SMILING
CONFUCIUS SAY
Marion Hutton
ROSE ROOM
WANG WANG BLUES
ONE DOZEN ROSES
Marion Hutton, Tex Beneke, The Modernaires
SWING LOW, SWEET CHARIOT
CONVERSATION PIECE
IF I HAD MY WAY
ALL THE THINGS YOU ARE
OH, JOHNNY! OH, JOHNNY! OH!
Marion Hutton
BLUE AND BROKENHEARTED
BLUE AFTERGLOW
IF YOU WERE THE
ONLY GIRL IN THE WORLD
SWEET POTATO PIPER
Marion Hutton
SONG OF THE ISLANDS
BYE BYE BLUES
SOLID AS A STONEWALL, JACKSON
GABBY GOOSE
I HEAR A RHAPSODY
Ray Eberle, The Modernaires
I CRIED FOR YOU
THIS CHANGING WORLD
Ray Eberle
MARIE
BLUE SKIES
SOLITUDE
A-TISKET A-TASKET
Marion Hutton, Tex Beneke

$2 EITHER STEREO or REGULAR L.P.

NATIONALLY ADVERTISED PRICES TOTAL UP TO $17.94

221. Their 12 all-time hits, freshly recut in hi fi and stereo! *Twilight Time, Peg o' My Heart,* etc.

211. Driving, irresistible cha-cha rhythms, modern big-band sounds, colorful hi-fi effects.

210. 12 Yankeeland standards go cha cha! *Paper Doll, Manhattan, If You Knew Susie,* etc.

222. 16 splendidly sung Foster classics, 40-page song book with words and music. Sing along!

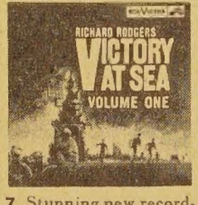
214. Best-selling album by the new vocal sensation! *The Lady Is a Tramp, Someday,* etc.

202. Soundtrack recording from late tenor's last film. *Come Prima, Vesti la giubba, O sole mio.*

217. Organ—with a difference! 12 "Paris" hits: *I Love Paris, April in Paris, River Seine,* etc.

4. Original soundtrack recording from film hit. 15 hardy perennials. M. Gaynor, R. Brazzi.

5. All-time best-selling classical album by the young pianist who took Moscow by storm.



7. Stunning new recording of the dramatic 9-section suite from the award-winning TV score.

54. 15 strutting marches by diverse composers. *Colonel Bogey, 76 Trombones, March of the Toys.*

100. Two super-stars sing Gershwin gems in fresh, modern style. Current best-seller.

89. Exciting, exotic African rhythms and themes, sometimes blended with jazz.

ALL ALBUMS ARE 12-INCH 33⅓ R. P. M.

THE RCA VICTOR POPULAR ALBUM CLUB P94-9
P. O. Box 80, Village Station, New York 14, N. Y.

Please register me as a member of The RCA VICTOR Popular Album Club and send me the three-record Glenn Miller Album or the three albums whose numbers I have specified at right for which I will pay $2.00 (plus a small postage and handling charge). I agree to buy four other albums offered by the Club within the next year, for each of which I will be billed at the manufacturer's nationally advertised price; regular L.P. usually $3.98, at times $4.98; stereo versions $4.98, at times $5.98. (A small postage and handling charge is added to all prices.) Thereafter, I need buy only four such albums in any twelve-month period to maintain membership. I may cancel any time after buying four albums from the Club (in addition to those included in this introductory offer), but if I continue after my fourth purchase, for every two albums I buy I may choose a third album free.

PLEASE CHECK THE DIVISION YOU WISH TO JOIN ☐ REGULAR L. P. ☐ STEREOPHONIC

Mr. / *Mrs.* / *Miss* _____

Address _____

City _____ *Zone* _____ *State* _____

If you wish your membership credited to an authorized RCA VICTOR dealer, please fill in below:

Dealer _____

SEND ME THE THREE-RECORD GLENN MILLER ALBUM ☐

OR

THESE THREE ALBUMS (Indicate number) ☐ ☐ ☐

19-21 Send no money. A bill will be sent. Albums can be shipped only to residents of the U. S., its territories and Canada. Albums for Canadian members are made in Canada and shipped duty free from Ontario.

Regular L. P. Division of the Club. Regular L. P. discs sound better than ever on stereo phonographs. However, stereo records can be played only on stereophonic equipment.

RAILROAD MAGAZINE

THE MAGAZINE OF ADVENTUROUS RAILROADING—FOUNDED 1906

VOL. 71, NO. 6 OCTOBER, 1960 50 CENTS

FREEMAN HUBBARD
Editor

SY REICH
Technical Editor

BERNARD WHITE
Art Director

BARBARA KREIMER
Information Booth

STEVE MAGUIRE
Transit Topics

ILLUSTRATED FEATURES

Photos of the Month 13
Railway Built by Chocolate Bars ..Stephen D. Maguire 16
2-10-2 Locomotives and Their Kin .....H. L. Kelso 21
Roster of the Milwaukee Road .....Sy Reich 58

SHORT HAULS

Along the Iron Pike (pen drawings) .....Joe Easley 30
I Wish I Knew the Answer .....Howard R. Wyberg 42
Hi-Fi Railroad Recordings .....Frank P. Donovan, Jr. 50

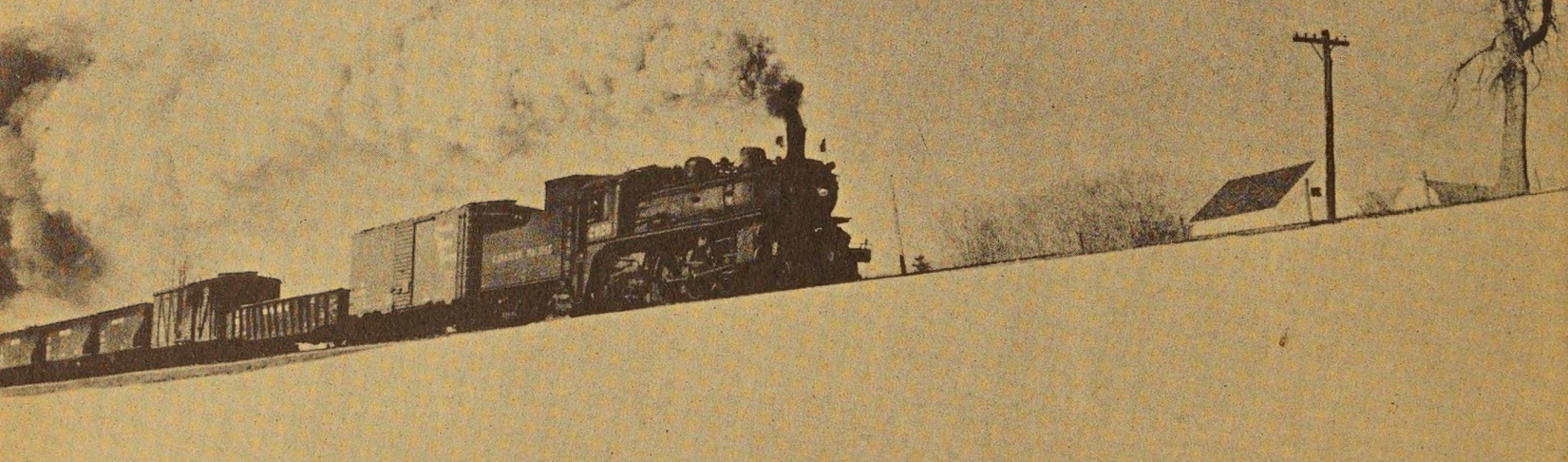
FICTION

Emergency Run (Pennsy No. 7003) .....John Johns 44

DEPARTMENTS

Mail Car 6
Information Booth 31
Transit Topics 36
Books of the Rails 52
Railroad Hobby Club .. 53
The Switch List 61

Another action shot of Canadian Pacific 2626, the engine pictured on our front cover, also made by David Plowden.



HENRY STEEGER, *Publisher*
THOMAS HARRAGAN, *Associate Publisher*
P. J. GLEASON, *Production Manager*
IRA MOSHIER, *Newsstand Sales Manager*
JOSEPH MUCCIGROSSO, *Subscription Manager*

ADV. REPRESENTATIVES
Wilson & Stark, 40 East 50th St., New York, N. Y.
Harley L. Ward, Inc., 360 North Michigan Ave., Chicago, Ill.
Townsend Millsap & Co., 110 Sutter St., San Francisco, Calif.
Townsend Millsap & Co., 159 So. Vermont Ave., Los Angeles 4, Calif.

CHANGE OF ADDRESS: POSTMASTER—Please mail Form 3579 notices to: RAILROAD, 205 East 42nd Street, New York 17, N. Y.

Published bi-monthly by Popular Publications, Inc., at 1250 Camden Ave., S.W., Canton 6, Ohio. Editorial and executive offices, 205 East 42nd Street, New York 17, N. Y. Henry Steeger, President: John J. McVarish, Treasurer. Second-class postage paid at Canton, Ohio.

Copyright 1960 by Popular Publications, Inc. This issue is published simultaneously in the Dominion of Canada. Copyright under International Copyright Convention and Pan-American Copyright Conventions. All rights reserved, including the right of reproduction, in whole or in part, in any form.

Title registered in U.S. Patent Office. Single copy, 50c. Subscription for U.S.A., its possessions, and Canada, $5.00 for 12 issues. Other countries, $6.00. When submitting manuscripts, enclose stamped, self-addressed envelope for their return, if found unacceptable. The publishers will exercise care in the handling of unsolicited manuscripts, but assume no responsibility for their return. Printed in U.S.A.

Cast your ballot for a successful future!

249 I.C.S. COURSES

I.C.S. is the oldest and largest correspondence school. 249 courses. Business, industrial, engineering, academic, high school. One for you. Direct, job-related. Bedrock facts and theory plus practical application. Complete lesson and answer service. No skimping. Diploma to graduates.

Send for the 3 free booklets offered below and find out how I.C.S. can be your road to success.

ACCOUNTING
Accounting
Auditing
Cost Accounting
General Accounting
Junior Accounting
Practical Accounting
Public Accounting

ADVERTISING
Advertising
Magazine & Newspaper Advertising

ARCHITECTURE AND BUILDING CONSTRUCTION
Architectural Drawing & Designing
Architectural Interiors
Architecture
Building Contractor
Building Contractor with Drawing
Building Estimator
Building Maintenance
Carpenter-Builder
Carpentry & Millwork
House Planning
Lumber Dealer
Mason
Painting Contractor
Reading Arch. Blueprints
Reading Struct. Blueprints

ART
Advertising Layout & Illustration
Amateur Artist
Commercial Art
Commercial Cartooning
Fashion Illustrating
Figure Drawing & Painting
Magazine Illustrating
Show Card & Sign Prod'tn
Show Card Writing
Sign Painting & Designing
Sketching & Painting

AUTOMOTIVE
Auto Engine Tune-up
Automobile
Automobile Body Rebuilding and Refinishing
Automobile Electrical Technician
Automobile Technician
Diesel Engines
Diesel-Gas Motor Vehicle Engines
Gas Engines
Internal Combustion Engines

AVIATION
Aero-Engineering Technology
Aircraft & Engine Mechanic
Aircraft Mechanic
Aviation Engine Mechanic

BUSINESS
Business Administration
Business Correspondence
Business Law
Business Management
Business Management & Marketing
Business Management & Production
Business Psychology
Canadian Business Management
Clerk-Typist
Commercial
Condensed Business Practice
Federal Tax Course
Managing a Small Business
Marketing
Office Administrative Engineering
Office Management
Professional Secretary
Programming for Digital Computers
Purchasing Agent
Retail BusinessManagement
Shorthand
Stenographic
Typewriting

CHEMICAL
Analytical Chemistry
Chemical Engineering
Chemical Engineering Unit Operation
Chemical Laboratory Technician
Elements of Nuclear Energy
General Chemistry
Industrial Analytical Chemistry
Industrial Chemistry
Professional Engineer—Chemical

PULP AND PAPER
Paper Making
Pulp & Paper Engineering
Pulp & Paper Making
Pulp Making

CIVIL ENGINEERING
Bridge & Building Foreman
Civil Engineering
Construction Engineering
Highway Engineering
Mine Surveying & Mapping
Principles of Mapping
Principles of Surveying
Professional Engineer—Civil
Railroad Engineering
Roadmaster
Sanitary Engineering
Section Foreman
Sewage Plant Operator
Structural Engineering
Surveying and Mapping
Water Works Operator

DRAFTING
Aircraft Drafting
Architectural Drafting
Drafting & Machine Design
Electrical Drafting
Electrical Engineer Drafting
Electronic Drafting
Industrial Piping Drafting
Junior Mechanical Drafting
Mechanical Drafting
Sheet Metal Drafting
Structural Drafting

ELECTRICAL
Elec. Appliance Servicing
Electrical Contractor
Electrical Eng'r'g (Power Plant option—Electronic option)
Electrical Engineering Tech.
Electrical Instrument Tech.
Electric Motor Repairman
Illumination Eng'r'g Tech.
Industrial Electrical Techn.
Power-House Engineering
Power Line Design and Construction
Practical Electrician
Practical Lineman
Professional Engineer—Electrical
Reading Electrical Blueprints

HIGH SCHOOL
Good English
High School Business
High School College Prep (Arts)
High School College Prep (Engineering & Science)
High School General
High School Mathematics
High School Secretarial
Modern Letter Writing
Short Story Writing

LEADERSHIP
Industrial Foremanship
Industrial Supervision
Personnel-Labor Relations
Supervision

MATHEMATICS
Mathematics and Mechanics for Engineers
Mathematics and Physics for Engineers
Mathematics and Physics for Technicians

MECHANICAL
Industrial Engineering
Industrial Instrumentation
Junior Mechanical Engineering
Mechanical Engineering
Professional Engineer—Mechanical
Quality Control
Introductory Technical Writing

PETROLEUM
Natural Gas Production & Transmission
Oil Field Technology
Petroleum Production
Petroleum Prod'tn Eng'r'g
Petroleum Refinery Operator
Petroleum Refining
Petroleum Technology

PLASTICS
Plastics Technician

PLUMBING, HEATING, AIR CONDITIONING
Air Conditioning
Air Conditioning with Draw'g
Air Conditioning Maintenance
Domestic Heating with Oil & Gas
Domestic Refrigeration
Heating
Heating & Air Conditioning with Drawing
Heating, Drawing & Estimat'g
Plumbing
Plumbing, Drawing & Estimating
Plumbing & Heating
Plumbing & Steamfitting
Practical Plumbing
Refrigeration
Refrigeration & Air Conditioning
Steamfitting

RAILROAD
Air Brake Equipment
Car Inspector & Air Brake
Diesel Electrician
Diesel Engineer & Fireman
Diesel Locomotive
Diesel Machinist
Railroad Administration
Railroad Car Repairer

SALESMANSHIP
Creative Salesmanship
Real Estate Salesmanship
Retail Merchandising
Retail Selling
Sales Management
Salesmanship
Salesmanship & Sales Management

SHOP PRACTICE
Boilermaking
Electric Welding
Foundry Practice
Gas and Electric Welding
Gas Welding
Heat Treatment of Metals
Industrial Metallurgy
Machine Shop Inspection
Machine Shop Practice
Machine Shop Practice & Toolmaking
Metallurgical Engineering Technology
Physical Quality Control of Metals
Practical Millwrighting
Reading Shop Blueprints
Resistance Welding Technology
Rigging
Safety Engin'r'g Technology
Sheet Metal Worker
Tool Design
Tool Engineering Technology
Toolmaking
Welding Engineering Technology

STEAM AND DIESEL POWER
Combustion Engineering
Power Plant Engineering
Stationary Building Eng'r'g
Stationary Diesel Eng'r'g
Stationary Diesel-Electric Engineering
Stationary Fireman
Stationary Steam Eng'r'g
Steam Engine Operation

TEXTILES
Carding and Spinning
Carding
Cotton Manufacturing
Cotton Warping & Weaving
Dyeing & Finishing
Hosiery and Circular Knitting
Loom Fixing
Spinning
Synthetic Fabric Manufacturing
Synthetic Throwing, Warping & Weaving
Textile Designing
Textile Engineering
Textile Mill Supervisor
Woolen Manufacturing
Worsted Manufacturing

TRAFFIC
Motor Traffic Management
Railroad Rate Clerk
Traffic Management

TV-RADIO-ELECTRONICS
Gen'l Electronics Technician
Industrial Electronics
Practical Radio-TV Eng'r'g
Radio Operating
Radio Servicing
Radio Servicing with Practical Training
Radio & TV Servicing
Radio & TV Servicing with Practical Training
Servicing Electr'n'c Devices
Servicing Sound Equi'p't
Practical Telephony
Telephony and Radio Communications
TV Receiver Servicing
TV Technician

For Real Job Security—Get an I. C. S. Diploma! I. C. S., Scranton 15, Penna.

Accredited Member, National Home Study Council

INTERNATIONAL CORRESPONDENCE SCHOOLS

ICS

BOX 84752H, SCRANTON 15, PENNA. **In Hawaii reply P.O. Box 418, Honolulu**

Without cost or obligation, send me "HOW to SUCCEED," the opportunity booklet about the field I have indicated below, and a sample lesson (Math.)

Name of the course in which you are interested _____

Your Name _____ Age _____ Home Address _____

City _____ Zone _____ State _____ Working Hours _____ A.M. to _____ P.M. _____

Occupation _____ Canadian residents send coupon to International Correspondence Schools, Canadian, Ltd., Montreal, Canada. . . . Special low monthly tuition rates to members of the U. S. Armed Forces.

MAIL CAR

Railroaders and Fans Sit in With the Editorial Crew

OUR READERS seem to be evenly divided in their preference for photographic and painted cover pictures, so we are alternating between the two. This issue carries a photo by David Plowden, 1239 Madison Ave., New York City. Next time, a beautiful painting of a 2-8-0 on the Duluth, Missabe & Iron Range by Herb Mott.

Our current subject is Canadian Pacific engine 2626, Class G2-U, built by CPR in April, 1913, and equipped with a Type A superheater. Her specifications include weight on drivers, 156,000 lbs.; total engine weight, 241,000 lbs.; drivers, 70"; cylinders, 22½ by 28"; boiler pressure, 200 lbs., and tractive effort, 24,000 lbs.

The train she is pulling over the Chamcook Lake is No. 84. The CPR contracts annually for ice, 16 inches thick, cut from this lake for use in controlling temperatures in its freight and passenger equipment. Last winter's cutting was 4,000 tons. The ice is stockpiled at Edmundston, Aroostook, Woodstock, St. Andrews, Chipman, and McAdam, all in New Brunswick, and at Brownville Junction in Maine. ●

BRIEF ITEMS. The New York Central's last surviving steam engine, aside from the ancient *DeWitt Clinton* and the rebuilt 999, is the 2933, Class 1-2d, not in operating condition, preserved for display purposes at Selkirk Yard, south of Albany, N. Y. The 2933 is a Mohawk type (4-8-2), built by Schenectady in 1930 with 69-inch drivers and 27x30-inch cylinders. Anyone wishing to photograph her should first get a clearance from John Salter, the Central's district public relations director at Syracuse, N. Y.

Seventy-five giant covered hopper cars, the world's largest, are rolling along Southern Railway tracks. Their recent construction by Magor Car Corp., Clifton, N. J., was the biggest order for aluminum freight cars ever placed in the U. S. Each is 60 feet long, 11 feet longer than ordinary cars.

Great Northern Railway has applied for authority to build a 110-mile pipeline in North Dakota from Lignite and Newburg to the Minot area, where crude oil arriving by pipeline would be loaded into tank cars. Did any other railroad ever plan to build a pipeline?

The daughter of a Great Northern Railway sheet-metal worker and mechanic, Miss Sharonlee Marstad, a blue-eyed blonde, is employed by the "Big G" as a statistical clerk in the Freight Accounts department. Sharonlee lives at 1032 Central Ave., St. Paul, Minn. Last winter she won the coveted title of Great Northern Princess at the St. Paul Winter Carnival. Since then she has reached the ripe age of 22. We publish her picture for the same reason that the *British Railways Magazine* carries a "Beauty Corner" portrait in every issue.

That excellent shot of C&S engine 902 in our Aug. issue, page 22, was made by Richard H. Kindig (not Perry), 3831 Perry St., Denver, Colo.

D&RGW diesel locomotives are now using a new fuel derived from gilsonite, the hydrocarbon mineral that the old Uintah Railway hauled in large quan-

NOW! BUY WAR SURPLUS DIRECT FROM U.S. GOVT

Airforce, Navy, Army Equipment often goes . . . for pennies on the dollar

PRICES PAID AT RECENT SURPLUS SALES

Jeeps .$277 Autos . . .$78 Planes . . . . .$366 Boats .$5.90 Fk-Lift . . . .$197 Trucks .$212 Generator . .$8.78 Hoists .$3.68 Compressor .$9.69 Motors . .99¢ Hyd. Cyls. . .$1.09 Tractor . .$68 Gear Box . . . .97¢

BUY DIRECT from the U. S. Government at TREMENDOUS SAVINGS. Eliminate the middlemen – SAVE BIG MONEY! Pay as LOW as 2¢ on the dollar or less. Our Directory Government Surplus Sales lists 100's Army, Navy, Air Force Government Surplus Depots. Many of them right in your own back yard. BUY JEEPS, sports equipment, hunting, fishing and photographic equipment and supplies, radio, electronic and electrical equipment, trucks, boats, airplanes. Plumbing, hardware, office equipment and supplies. Tools, machinery, furniture. We DO NOT sell jeeps or other surplus. This 1960 book tells how to buy Government Surplus direct. No dealer profits to pay. Send $1 TODAY for "Government Surplus Directory."

MAIL COUPON NOW!

Aviation Surplus Center, Dept. AM-3
Box 789, York, Pa.

Gentlemen:
Please rush me your 1960 "Govt Surplus Directory." Enclosed is $1.00 in full payment. (We accept cash, checks, stamps or money orders.)

NAME_____

ADDRESS_____

CITY_____ ZONE____ STATE_____

CASH IN ON WAR SURPLUS!

IMAGINE! HUNDRED DOLLAR VALUES ---NOW SELLING FOR PENNIES!!

Hundreds of surplus items for home, farm, garage and shop . . . going for pennies on the dollar! All built to the government's highest standards. Tools, machinery, gear reducers, pumps, boats, motors; page after page of tremendous bargains.

SEE FOR YOURSELF: Send for this big catalog and see for yourself! See pages of surprising bargains. See items that cost the government thousands of dollars going for pocket change. Act now. Cash in on government surplus. Send 25c for your copy.

KARL ORT, Dept. AM-4, THOMASVILLE, PA.

Better buys from

SEAPORT

FREE AMMO!

Box of military ammo included FREE with rifle purchase. Note: Offer valid only if coupon below is enclosed with order.

Everything for the Hunter, Shooter, Sportsman. ORDER TODAY!

30/06 $39.95 Sporterized SPRINGFIELDS

HIGH NUMBERS

Guaranteed very good inside & out. This 6-shot bolt action makes a fine hunting rifle. Has new walnut sporterized stock. 4-groove bbls.; fires military 30/06 cal. ammo, or hunting ammo. Specs: 24" bbl.; muzzle vel. 2800 fps.; combo. open & peep sights, fully adjustable windage & elevation to 2850 yds. Wt. approx. 7½ lbs. Only $39.95. AMMO: 100 rds. military $7.50, 40 rds. soft pt. $5.90.

NEW FRENCH AUTO . . . $29.95

Imported direct by us from famous French gun firm. Brand new, trim, compact weapon. Fires easy-to-obtain American made ammo. Avail. in .22 Long Rifle, 32 or 380 calibers. Factory boxed incl. instruction booklet. (Regularly $49.00) Seaport's price only $29.95. **Please specify caliber.** Ammo: Box of 25 for .32 or .380, $2.25; .22 L. R., 75c. Holster, $2.25.

Terrific Buy! WINCHESTER .22 only $9.95

BARGAIN OF A LIFETIME!

This Winchester Model 67 bolt action single shot rifle features: 27" round, tapered proof marked barrel, crowned at muzzle. Winch. 75C front & 32B sporting rear sights & short compact bolt with pear shaped bolt handle. Military safety lock. Am. walnut sporting type pistol grip stock with semi-beavertail fore-end, automatic ejector. Wt. approx. 5 lbs. Shoots .22 shorts, longs & L.R. ammo. Good inside & out. Only $9.95. Special—.22 Winch. 4X scope & mt. only $15.95. Also available in Savage Model 3C.

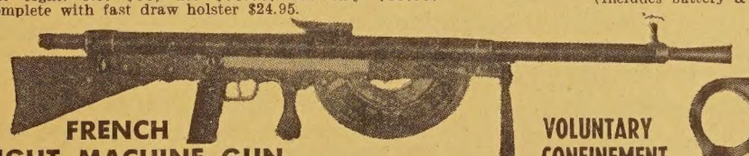
.22 DOUBLE DERRINGER ONLY $19.95

Imported from Europe. It is an exact copy of famous Remington Derringer popular in the late 1800's. Valuable collectors' item. Fine "old world" gun craftsmanship has been employed to give you a superior handgun & still retain all the features of the original Derringer. Accurate. Shoots .22 short, long or long rifle. Checkered black grips. Only $19.95. Sparkling chrome-plated model only $22.50 Western hand tooled holster $4.50. .38 Special nickel Derringer $34.95

GUNSLINGERS! TEXAN .22 only $19.95

Sensational new slide rod .22 shoots all three —long, short, and long rifle .22 ammo, double and single action. A tight, well-made piece. Looks like an old frontier revolver, acts like an old frontier revolver. Terrific gun for fast draw practice and plinking. Feels just right. Not $63, not $75.00, but only $19.95. Complete with fast draw holster $24.95.

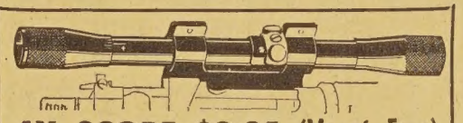
FRENCH LIGHT MACHINE GUN



At last, it's here . . . but only in limited quantities . . . the fabulous FRENCH CHAUCHET. A real collector's find, this welded light machine gun has probably seen years of service and could tell many a tale if it could only speak. While they last, $14.95.

14.95

4X SCOPE $9.95 (Mount Free)



Rugged, durable, dependable . . . and performs perfectly on ANY rifle. Extends shooting time from dawn to dusk. Distortion-free, color corrected. Lens hardcoated to U.S. Army standards. Easy to adjust windage and elevation. Easy to install. Weighs less than 10 oz. mounted. 4X scope and FREE mts. avail for all rifles, $9.95. 1.4X hndgun scpe $14.95. (Specify rifle or handgun make in ordering.)

.38 S & W ENFIELD *Commando* REVOLVER (SNUB NOSE) $16.95

This quick-draw, double action revolver was the side-arm of Britain's famed Commando Raiders of World War II. Exceedingly accurate, packs a powerful punch with light recoil. East handling, thumb rest grips. Good condition. Specs: overall length 9¾", bbl. 5", wt. 28 oz., capacity 6 rounds. A collector's find. 4" model $12.95, snub nose $16.95. For select models add $3. .38 Cal. Ammo box of 25, $1.80. Holster, $3.95.

.22 6-SHOT REVOLVER $12.95

FIRES BOTH .22 SHORT & LONG AMMO. This sensational NEW 6-shot Rosco Vest Pocket .22 long revolver would be a tremendous value at 3 times its price. Made in W. Germany, it is a tight, well-made, exceedingly accurate handgun. Fires .22 Long & Short ammo. Features side gate loading, trigger adjustment, screw-in ejector rod. Has STEEL RIFLED BARREL with blade front sights. Terrific for target shooting, varmint hunting or home defense. Only $12.95. Gleaming nickel-plated model only $14.95. Leather holster $2.25.

.22 SCOPE & AMMO BARGAIN

4X scope & FREE mount for all popular .22 rifles only $8.95. Please specify type of rifle. 100 rds. .22 short French ball ammo..... $1.30

S & W 38 SPECIAL 2" Bbl., $39.95

Made in U.S. by S & W. 6-shot revolver w/swing out cyl. Fine cond. Inside & out. Choice of bright nickel or blued model with Stag grips. Only $39.95. Holster $3.95. .38 Spec. ammo, box 25 . . . $1.35.

NEW TRANSISTOR RADIO WITH SPEAKER 9.95 ppd.

No wires, or ear plugs to fool with. This pocket-sized POWERFUL new precision engineered *all transistor radio* plays loud and clear ANYWHERE, even in street cars and buses. Terrific gift for teenager, traveler, or for the person who attends baseball, football games, and wants to hear the sportscaster. Only $9.95 ppd. (includes battery & carrying case).

VOLUNTARY CONFINEMENT

Genuine Police Handcuffs feature deluxe chrome finish with double lock. Light, compact, & flexible (equipped with 2 keys). Clever gift for peace officers, jurist, or for the man who has everything. Foolproof, exciting. Only $5.75 ppd.; belt-type leather case, $1.25 ppd.

LEE ENFIELDS #4 .303 CAL. $15.95 WITH SCOPE $22.95

Of WWII fame, this is the British rifle that drove Rommel out of Africa & saw service on the Continent & in the Korean conflict. Has simplified bolt release & a peep sight mounted on rear of receiver. Cal. .303 British. Bbl. 25½", 10-shot magazine, positive thumb safety. Good inside & out. Only $15.95. With scope $22.95. Custom Enfield Sporter $19.95. With scope $25.95. AMMO: 100 Rds. Military....$7.50 40 Rds. Soft Pt.....$5.90

6.5x55mm MAUSER BRUSH CARBINE $29.95

Sought after as target and hunting weapon, this fine M/94 Swedish Brush Carbine features extremely fast action, is light, and has refinements over other Mausers. This caliber has won more Olympic matches than any other. 6/5 mm & 55 caliber, 19" bbl., 5 shot, 7 lbs., choice walnut stock, adjustable rear sights; very good condition, $29.95. Select exteriors, $34.95. Bayonet $2.50, sling 75c. AMMO: 100 rds. military $7.50, 40 rds. soft pt. $5.90.

WEBLEY MK. VI .45 REVOLVER . . . $14.95

Latest model adopted by British Armed Forces. It is extremely accurate, has exceptional smooth action. Fires either as a single or a double action. Specs: Overall length 11¼", barrel 6", wt. 12 lbs. GOOD CONDITION. .45 Cal. $14.95. (Choice .38 Enfields or .45 Webleys, $17.95.) Holster $3.25. Specially selected like new—$17.95. .45 ammo, box of 24 $1.50

ITALIAN POCKET AUTO. .25 CAL. — $19.95

Imported direct by us from Italy's finest gun manufacturer. Brand new! Trim, compact weapon fires powerful and easily obtainable .25 Cal. American made ammo. Also avail. calibers .22 long or .22 short . . . only $22.50. Have original factory blue finish. 6-shot capacity makes excellent plinking and home protection weapon. Fixed sights. Weight approx. 13 oz. Only $19.95. Holster $2.25. .25 cal. ammo box of 25..... $1.85

MAIL COUPON

SEAPORT TRADERS, INC. 1221 S. Grand Ave., Dept. AM-10, L.A. 15, Calif.

Gentlemen: Please rush me the following:

Quantity	Product	Cost per Item	Total
———	30/06 Springfields	$39.95	
———	French Automatic	$29.95	
———	Winchester .22	$9.95	
———	.22 Bbl. Derringer	$19.95	
———	Texan .22	$19.95	
———	Machine Gun	$14.95	
———	4X Rifle Scope	$9.95	
———	1.4X Handgun Scope	$14.95	
———	.38 S & W Enfield 4"	$12.95	
———	.38 S & W Enfield 2"	$16.95	
———	.22 6-shot revolver	$12.95	
———	.22 4X Scope	$8.95	
———	.22 French ball ammo	$1.30	
———	S & W .38 Special 2"	$39.95	
———	Transistor Radio	$9.95	
———	Handcuffs	$5.75	
———	Lee Enfield w/scope	$22.95	
———	Mauser Brush Carbine	$29.95	
———	.45 Webley MK VI	$14.95	
———	Ital. Auto. 25 cal.	$19.95	

☐ NOTE: Please Enclose 1 Box of FREE Military Ammo with Rifle Purchase.

TOTAL PRICE _____

Enclosed _____ cash, _____ check or _____ M.O. (COD's require ⅓ deposit.) (Be sure to specify & give complete ordering info.) I understand all items are to be shipped FOB L.A., express charges collect. Calif. res. add 4% state tax. *For fast service when ordering pistols, please sign statement: "I am not an alien, have never been convicted of a crime of violence, am not under indictment or a fugitive. I am 18 years or over."*

NAME _____ (please sign)

ADDRESS _____

CITY _____ STATE _____

tities. (See "Narrow-Gage Memories," June '60.) Mined in eastern Utah and refined on the Rio Grande main line near Grand Junction, Colo., gilsonite is the basis of a gasoline and a refined metallurgical coke.

"Shortlines fascinate me," writes Tom Solomon, 103 W. Church St., Headland, Ala. "That's why I like 'Frog' Smith's articles in *Railroad Magazine*. I explored the long-abandoned Birmingham, Columbus & St. Andrews line in Florida that he mentioned in 'Outside the Rules' (Aug. issue)."

Apropos of "hoodooed" engines discussed in "Outside the Rules" is a comment from Charles E. Fisher, president, Railway & Locomotive Historical Society, Inc., 20 Wilde Rd., Waban 68, Mass.: "Boston & Albany No. 564, one of six Pacifics, Class Km, built by Alco in 1913, was intended for fast passenger runs but developed so many faults and had so much trouble that she was downgraded to pusher service on passenger trains between Pittsfield and Washington, Mass., and later pulled passenger locals out of Boston."

Osborne Bay & Wharf 22-truck Shay is not a woodburner, as Tom Lawson said in June issue, page 29, corrects James Gertz, 423 E. 5th St., Port Angeles, Wash. Incidentally, James has the records (parts numbers, specifications, etc.) of all Heislers sold new on the West Coast.

Tinted, heat-resistant glass has been installed in alternate windows on one side of New York Central commuter coach 4550 as an experiment to check on passenger reaction. Test panes serve the dual function of reducing glare and absorbing summer-heat rays.

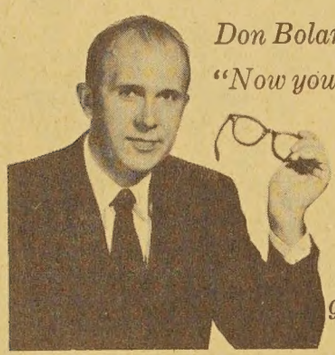
Norfolk & Western is building 1,000 85-ton, roller-bearing and coal-carrying hopper cars in its Roanoke shops at a cost of $12 million. No other road has 85-ton hoppers.

This comment on "San Juan Express" by Larson Powell (June *Railroad*) comes from Robert Wood, Box 1503, Farmington, N. M.: "Many steam fans and others are *not* 'hopefully waiting' for Bill White to take over the Rio Grande's narrow-gage Silverton line. The Standard Uranium, Inc., a mining venture backed by several million dollars, would need the line to haul its iron ore. If Mr. White gets the railroad, it will be solely a summertime passenger service. The towns of Silverton and Durango could realize more cash from a steady, year-round mining business than a summer tourist attraction." ●

CHESAPEAKE & OHIO, the nation's biggest soft-coal carrier, and the old Baltimore & Ohio have moved toward consolidation by offering to buy some of each other's stock. If they actually merge, they will have an 11,000-mile system, second in size only to the Pennsy and the Southern Pacific on the list of American railroads. There is more than a slight possibility that New York Central will join C&O and B&O in a three-way merger.

Meanwhile, the Atlantic Coast Line and the Seaboard Air Line are considering plans to merge into a new road to be called the Seaboard Coast Line—a redundant name, inasmuch as *Seaboard* and *Coast* mean pretty much the same thing. If this merger goes through, the resulting Seaboard Coast Line would be No. 10 on the list.

Eighteen other U. S. roads are studying consolidation. It is a safe bet that future maps will show fewer and much bigger rail systems. This trend was set long ago by such gigantic setups as Standard Oil, U. S. Steel, General Motors, and so on. Economic pressure is forcing the little fellows and even some of the rather big ones to choose between amalgamation or abandonment. ●



Don Bolander says: "Now you can learn to speak and write like a college graduate."

IS YOUR ENGLISH HOLDING YOU BACK?

During a recent interview, Don Bolander, director of Career Institute of Chicago and a leading authority on adult education, said, "You don't have to go back to school in order to speak and write like a college graduate. You can gain the ability quickly and easily in the privacy of your own home through the Career Institute Method." In his answers to the following questions, Bolander tells how.

Question: *What is so important about a person's ability to speak and write?*

Answer: People judge you by the way you speak and write. Poor English weakens your self-confidence—handicaps you in your dealings with other people. Good English is absolutely necessary for getting ahead. You can't win the respect and confidence of other persons without a sure command of good English.

Question: *What do you mean by a "command of English"?*

Answer: A command of English means you can express yourself clearly and easily without fear of embarrassment. It means you can write well, carry on a good conversation—also read rapidly and remember what you read. Good English can help you throw off self-doubts that may be holding you back.

Question: *But isn't it necessary for a person to go to school in order to gain a command of good English?*

Answer: No, not any more. You can gain the ability to speak and write like a college graduate right in your own home—in only a few minutes each day.

Question: *Is this something new?*

Answer: Career Institute of Chicago has been helping people for many years. The Career Institute Method quickly shows you how to stop making embarrassing mistakes, enlarge your vocabulary, develop your writing ability, discover the "secrets" of interesting conversation.

Question: *Does it really work?*

Answer: Yes, beyond question. In my files there are thousands of letters, case histories and testimonials from people who have used the Career Institute Method to achieve amazing success in business and social life.

Question: *Who are some of these people?*

Answer: Almost anyone you can think of. The Career Institute Method is used by men and women of all ages. Some have attended college, others high school, and others only grade school. The method is used by business men and women, typists and secretaries, teachers, industrial workers, clerks, ministers, and public speakers, housewives, sales people, accountants, writers, foreign-born citizens, government and military personnel, and many others.

Question: *How long does it take for a person to gain the ability to speak and write like a college graduate, using the Career Institute Method?*

Answer: In some cases people take only a few weeks to gain a command of good English. Others take longer. It is up to you to set your own pace. In as little time as 15 minutes a day, you will see quick results.

Question: *How may a person find out more about the Career Institute Method?*

Answer: I will gladly mail a free 32-page booklet to anyone who is interested.

If you would like a free copy of the 32-page booklet, "How to Gain a Command of Good English," just fill out and send the coupon below.

DON BOLANDER **Dept. E-1010**
Career Institute, 30 E. Adams, Chicago 3, Ill.

Please mail me a free copy of your 32-page booklet, "How to Gain a Command of Good English."

Name_____

Street_____

City_____ Zone_____ State_____

How to 'take charge' of a highly-paid job in AIR CONDITIONING & REFRIGERATION

Are you interested in a better job, big money and a secure future? Do you prefer work that is interesting, a challenge to your imagination, and loaded with opportunities to go in business for yourself? Then why not consider a career as mechanic or technician in the Air Conditioning and Refrigeration industry!

You see, Air Conditioning is now America's finest opportunity field. The government reports that during the past 12 years, production increased 400%. *No other industry did better!* The fact is, 8,200,000 domestic and industrial units are produced annually. Already 150,000,000 are in use. Experts say that 20,000 technicians must be trained each year to match industry growth! You can qualify for a top-pay job. How? *Train at home in spare time.* The CTI method is easy, practical and resultful. Quick, too. For full information, *mail coupon below.*

Many CTI graduates go in business

It is relatively easy to start a repair business in the Air Conditioning and Refrigeration field. Armed with up-to-date knowledge, seasoned with skill acquired through practice on kits, and equipped with tools and gauges, many graduates start out on their own. Some expand into retail stores. Others have contracts to service taverns, restaurants, food stores and commercial buildings. The more resourceful become contractors. Conditions for success are excellent.

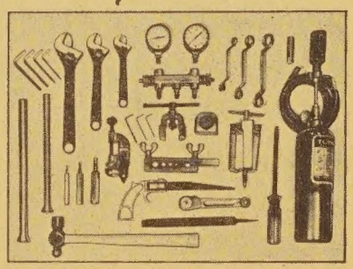
Many students earn cash as they train

The average CTI student is eager to put his skill to profitable work, on a part-time basis. Though most students prefer to tie up with local dealers and repair establishments, a surprising number are independents. The extra cash helps meet training cost. Often there's enough to bank, or invest in more equipment.

Letters prove efficiency of training

"I have a business of my own servicing domestic and commercial refrigerators."—*Paul Humphrey, Colo.* "I made $1,000 while training, and am now a refrigeration man for a dairy."—*Giles Minton, N. C.* "I opened a little shop and am swamped with work."—*Charles Corley, Kan.* "Doing service work on a part-time basis the past 10 months, I earned $2,400. Have a nice business."—*Renos Johnson, Ind.* "My firm advanced me to field superintendent."—*Milburn Dougan, Ark.* You can do as well as these graduates!

An exclusive feature of CTI training is that you get parts to build a ¼ h.p. commercial-type condensing unit (above). You also receive mechanic's tools and gauges (right). After unit is assembled, you can build an air conditioner, freezer, refrigerator or milk cooler. Only CTI sends *working* kits.



Learn by practicing—Get valuable experience

The modern way to train is to gain skill and experience *with* knowledge—not *after* you graduate. From CTI's simple picture-lessons, you master elemental theory. From experiments and building with kits, you develop skill. In other words, you learn by practicing, pick up solid experience much like on the job. That's the interesting, relaxing way to train after a day's work on your present job. CTI training is exciting!

Send for fact-filled booklets—Mail coupon now

Exactly what are your opportunities in Air Conditioning and Refrigeration? How does CTI train men for success? Get detailed, accurate answers to these and many more questions by filling out and mailing the coupon below. No obligation. —Commercial Trades Institute, Chicago 26, Ill.

COMMERCIAL TRADES INSTITUTE
1400 GREENLEAF AVENUE DEPT. R-763
CHICAGO 26, ILLINOIS

Please rush me your opportunity booklet, *Success in Air Conditioning and Refrigeration;* and *Lesson Samples.* Both free.

NAME_____ AGE_____

ADDRESS_____

CITY_____ ZONE_____ STATE_____

A Non-Profit Organization • Accredited by National Home Study Council

I BEGAN railroading at 13," says Henry H. Shuler, retired Atlantic Coast Line train dispatcher, Folly Beach,, S. C. "My uncle died suddenly while serving as agent at Manning, S. C., and I went there in 1896 to take his place. Later, I was assigned to other stations to relieve operators, but because of my extreme youth my name was not put officially on the payroll until March, 1897.

"We had no 16-hour law then. Agents met the local freight, no matter what time of day or night it arrived. But the ACL paid better wages than most commercial enterprises. Clerks in stores got only $10 or $15 a month; railroad telegraphers and agents received $40 or $50. Living costs were low. I asked a McFarland, N. C., lady if she would board me. 'Yes,' she said. 'Four dollars per month, and that includes room and meals and your washing and patching.' "

(If Mr. Shuler will give us that lady's address, we'd like to move down there ourselves. We don't know many places where you can get a room, meals, and laundry and mending services all for one dollar a week!) ●

THE TWO latest LP, hi-fi, 12-inch, railroad sound records on the market are *Extra* 1235 *East*, issued by Allan Sherry, 5445 Netherland Ave., Riverdale, N. Y., and *Steam Echoes*, recorded by E. P. Ripley for The Railway & Locomotive Historical Society, Inc., Southern Calif. Chapter, 15025 Oxnard St., Van Nuys, Calif.

Steam Echoes measures up to Ripley's high standards of beauty and technical perfection. It is a memorable souvenir of bygone days on the SP, the UP, and the CNR. No discriminating collector should miss it. Included in the price, $4.95, is a booklet by John B. Hungerford, 12 big pages, well illustrated, telling the story of each nostalgic scene. *Extra* 1235 *East*, $4.95, is a creditable recording of N&W steam and diesel operations. ●

OVERSEAS. "Years ago, while visiting a bookstall in Milan, Italy, I found several copies of *Railroad* on display, the first time I ever saw or heard of your magazine, and I bought them eagerly," writes E. W. Vreedenberg, c/o Shell, Teromol Pos 12/DKT, Djakarta, Indonesia. "The entire magazine interests me, except the photo section and locomotives rosters."

Another reader who buys *Railroad* in Milan, at the international newspaper kiosk of Piazza della Scala, is Piero Romagnano, via P. Isola, Novi Ligure, Italy, who writes: "I enjoy this magazine because I like to read about U. S. railroads, especially steam engines. I have on hand 5 dollars. May I subscribe for 12 issues?" (A foreign subscription costs $6, Piero.)

We have just received a copy of the Polish model magazine *Modelarz* from Jerzy Kucjarczyk, Skrytka Pocztown nr 6, Wroclaw, Polska (Poland), a railfan living behind the "iron curtain." An American reader generously gave Kerzy a subscription to *Railroad Magazine* so he could learn more about our way of life.

Now listen to O. H. Betts, 80 Grove Rd., Chadwell Heath, Romford, England: "We have here a mid-country town called Burton-on-Trent, where most of the beer in England is brewed. The breweries have railway tracks running into their works, and the town has 22 level railway crossings. The brewery locos are a delight, little 0-4-0 steamers with brightly polished brass domes."

Next on the list is P. G. Ellis, 3 Keiller St., Moorabbin, S. 20, Victoria, Australia. "A *Railroad Magazine* subscriber for years," he writes, "I have a large collection of railroad photographs and literature, especially narrow-gage. Australia is fast being dieselized, but we still have many active steam engines. One 2½-foot-gage line operates Garrett locomotives." ●

A NEW MOLD-PRODUCED FORMULA FOR BALDNESS and THINNING HAIR

A PERSONAL MESSAGE FOR YOU

Twenty-seven years of research and development have gone into my Formula, which has brought relief and satisfaction to thousands. It uses no oils, requires no heat, has no odor. Use it in the privacy of your home, only a few minutes a day . . . nobody will know you are treating your scalp. Although most (but not all) doctors believe that most hair loss is typical male baldness and nothing can be done about it, the testimonials below show clearly that the Formula has benefited many of my clients—even skeptical ones. No matter how long you have suffered from falling hair or from a receding hairline, my Formula has grown new hair for other people in a situation similar to yours. It may very well help you, too.

A solution of organic chemicals allowed to mold before filtering, my remarkable Formula works directly with nature to revitalize hair follicles and stimulate their growth. Read what this amazing product has done for others, then fill out and mail the coupon below so that I may start your treatment at once. If you wish more information, send for free literature.

Sincerely yours, Walter Field

✔ *Odorless*
✔ *Non-oily*
✔ *Easy to apply*

SATISFIED USERS ALL OVER THE U. S. A. TELL RESULTS OF THEIR TREATMENT

CALIFORNIA, Santa Ana: ". . . friends commented on my new crop. My wife is most enthusiastic over results."

SOUTH DAKOTA, Aberdeen: ". . . please send me four bottles . . . new hair on my bald spot."

NEW YORK, Monroe: ". . . hair is still improving, no itch . . . getting thicker."

WASHINGTON, Bellingham: ". . . your Formula has been 100% effective."

OHIO, Mansfield: ". . . I must admit . . . that your Field's Formula has done everything you said it would . . . would not hesitate to recommend it to anyone."

MINNESOTA, Duluth: "Dandruff has disappeared and itching stopped."

SOUTH CAROLINA, Spartanburg: "My scalp has cleared up . . . I also have hair coming out and filling in the bald spots."

MR. WALTER FIELD, RAB Industries, Dept. A-1
6399 Wilshire Blvd., Los Angeles 48, Calif.

MAIL COUPON TODAY!
DON'T WASTE PRECIOUS TIME

Mr. Walter Field, RAB Industries, Dept. A1
6399 Wilshire Blvd., Los Angeles 48, Calif.

☐ Please ship in plan wrapper two 8 oz. bottles (2 months supply) of Field's Hair Formula, with full instructions. I enclose $10.

☐ Please send free literature in plain envelope immediately.

Name_____

Address_____

City & Zone_____ State_____

(No C.O.D. orders shipped without $3.00 deposit.)

Artifacts presents Fashions de Paree

"YOU IN SENSATIONAL PARISIAN CREATIONS"

Rush your order now for these fabulous NEW French Fashions

A #1014 VOILA LA VAMP!
En Guarde, monsieur . . . your doll's sure to create a riot in this fabulous French creation. Every step is sure to be noticed in this figure-revealing glazed cotton sheath! You just can't hide the facts . . . this is pure-allure. The dress to dominate every siren's wardrobe. Patterned in polka-dot red, blue or black on white. Only $10.95

B #1015 SEXSE BEAUCOUP
Ooh . . . la . . . la! It's the sheath creation that has all Frenchmen frantic! Fits so perfectly . . . you'll need gendarme protection. Tiny shoulder straps are the only thing to frame that "flirtation bustline." It's so chic and sex-sational . . . he'll fairly flip every time you wear this hip-hugging honey. Comes in naughty-Navy or black shantung. Sizes 8 to 16. $10.98

C #1016 SE BOU PLAY
The French fell for this oriental original . . . and so will you! It shows off the lines to accent your greatest assets . . . and taunt his every longing. Nature brings you the ultimate in exotic glamour . . . made of shape-molded shantung. You'll wear daytime or night as man-trapper mandarin. A must-have creation for every wardrobe in Chinese red, willow-white or black. 8 to 16. $12.98

D #1011 MERCI . . . BABEE
He'll chase and he'll coo . . . over adorable you in this precious checked shirtwaist. It's the most popular style to hit the fashion scene in many a year . . . and it's the surest design to keep him at your beck 'n' call. Yards and yards of the soft-pleated skirt makes your waist seem even thinner. Fresh and washable in pale blue-white, pink & white checks, size 8 to 16. $8.98

E #1017 RUE DE LAPLAY
Such fun . . . so gay and provocative . . . in a frankly French fashion-all. It's the perfect figure compliment for the guy who loves the sexy-sporty type . . . or the lazy lounge-hound . . . Whatever he likes . . . he'll love you in this cotton-knit. Lined for shape retention . . . in black, red or Navy. Wear evenings with blouse . . . days without. 8 to 16. Direct from the French-scene only $13.98

F #1010 PIGALLE PLAYMATE
From the Casbah . . . to Paris . . . to you! Every yard of sensual, sheer nylon . . . a romantic inviter. Glittering gold lame halter, dips down and down . . . then bare to there . . . to meet the gold of la'femme full harem pants. Designed to reveal your every charm and enslave your enchanted sultan. 2-pc. tantalizer of gold 'n' black. S, m, l. Only $12.95

G #1013 LA EPICE
In France and here . . . the word is spice . . . for the sensational shirtwaist . . . to button-up for business-behavior . . . or button-down for "he-man" approval. It's the sweetest in shape sorcery . . . just loves to cling to your hips to make you trim and terrific. A real date-bait if you've ever owned one! In beautiful shantung. Sizes 8-16, black, Navy and nude-beige. only $9.98

H #944 LACE LA FEMME
It's almost a sin to hide . . . it's so lovely! Exquisitely designed to promote sheer witchcraft in bosom build-ups. Cut with promise of pleasin' and teasin' . . . in luxurious lace with the full-freedom elastic band . . . that just won't curl or twist. Has the famous full-up support . . . and the low-v neck for increased cleavage. Comes in pink, blue, red, white and black . . . Sizes 32 to 36A, 32 to 38 B & C cup. $3.95

I #542 EYEFULL POWER
Pardone mam'selle . . . what nature's denied glamour has supplied . . . with flesh-like foam padding . . . that resists heat, light, water and sun . . . In fact, resists everything but fashion flattery. Washes like a dream . . . and gives you those sheer seduction curves plus! Cut to create the cleavage you've always hoped for! Stitched cups point to that beautiful full-filled look. Sizes 32 to 36A . . . 32 to 38 B cup. White $2.95

J #444 LA PETIT CHERI
You're a dream . . . his little darling!! in this fantasy of lush, whisper thin nylon . . . lavished with lace and look-appeal. Shows you're every inch the woman with the three-way approach . . . strapless . . . cape-robe or as a neckline to ankle gown. Bewitchingly bold in black or rich red. Sizes s-m-l. $8.95

K #300 LE MYSTERE
Handle this heart with care . . . it does so much for your figure control. It's the newest from Paree . . . with the fabulous heart-shaped tummy-flattener. A must for figure-flattery beneath those stylish sheaths. Tames hips, fanny, thighs in feather-light, skin tight Nylon power net. The "helpful-heart," of glimmering satin . . . a lovely combination for such a low, low price. Waist sizes 22 to 32. White only. $3.95

#1012 C'EST FATAL
It's bound to happen . . . when a Frenchman dare enter your boudoir with such frivolous imagination . . . and this sheerest of sheer nylon. Luxuriously sheered shoulder shifts from high to that down-daring loveliness. A promise to lure even the meekest into night's niceties. Baby-doll you in racy red . . . or bold black . . . it's bound to happen . . . so you'll want several sets at this price. S, m, l. $6.95

FREE!
CATALOG
FULL YEAR'S SUBSCRIPTION
Enclose 25c for postage

COTTON KNIT

Terrific Styling

GUARANTEE
You must be 100% satisfied as to fit or quality

ARTIFACTS, INC HAS BRANCH ORDER DEPARTMENTS THROUGHOUT THE U.S.A.

→ Send your order to the one nearest you!

→ P.O. Box 665, LaPorte, Texas
→ P.O. Box 25134, Houston, Texas
→ P.O. Box 2044, Miami 40, Florida
→ P.O. Box 4984, San Francisco, California
→ P.O. Box 278, Brookfield, Illinois
→ P.O. Box 8054, Westwood Station, Denver, Colorado
→ G.P.O. Box 1415, New York 1, New York

Please send me the following order 2

STYLE #	QUAN.	SIZE	COLOR	PRICE

C.O.D.'S SEND 25% DEPOSIT

Name_____
Address_____
City_____ Zone____ State____

SEND TODAY — USE THIS EASY ORDER BLANK

How a Man Like YOU Won Through to SUCCESS!

California salesman Louis Delulio with car he won in Contest. Beside the car, he earned more than $2,200.00 in 9 weeks.

Money, New Car, Security...Read How They All Came "Babe" Delulio's Way!

Kind of "Portable Shoe Store" Outfit men like Delulio use to pocket big profits every month. Below: a few of the many others who owe their new cars to the opportunity offered you on this page.

Louis "Babe" Delulio of California loves Mason Shoe Mfg. Co.—wouldn't YOU, if all this happened to YOU? Delulio had tried everything—painter, bartender, truck driver. At 42, he was a store clerk . . . making $15 a day, Then a friend told him about Mason. The Mason people put "Babe" Delulio in business at *their* expense—set him up in a profitable "Portable Shoe Store" business he could run from home. Starting in spare time, he began making more money in an hour or two than he could make all day behind the counter—and the work was easier, more fun! Before long, "Babe" averaged $525 a month with Mason. Then the Company held one of their huge Contests. "Babe's" family got excited. They kept his sales "score" pinned up on the kitchen wall. Babe's customers pitched in. Many bought two pairs of Mason Shoes! *Babe won a brand new Car . . . a free trip to the Mason factory . . . and made over $2,200.00 in profits and bonus money—all in 9 short weeks!*

What "Babe" Did, You Can Do

Maybe *you* don't want $2,200.00. You may want more, or less. That's up to you. We'll make you the same offer we made Delulio: we'll send you—FREE—the same Money-making "Portable Shoe Store" Business you can run from home. You need no experience. We show you what to do and how to do it. You can start in spare time—evenings, Saturdays. You can start making money your very first hour. You keep 100% of your profits: as much as $217 a month extra for 2 easy orders a day . . . You start by taking orders from friends, relatives, neighbors, folks where you work. Everyone wants comfortable shoes, and you'll be amazed how people go for extra-comfortable Mason Shoes with exclusive Velvet-Eez Air Cushion Innersoles that seem to "soften sidewalks." Mason shoes are Nationally Advertised everywhere—have been since 1904. No wonder some top men have made as many as 20 sales the very first day—up to $10 in an hour, plus big Bonus Checks!

You Make Money Right Away With 230 Fast-Selling Items!

You feature 230 dress, sport, work shoe styles for men and women—including dozens of new shoe Discoveries. You'll run the best "shoe Store" business in town because you "carry" a greater selection than most stores; you draw on huge warehouse stock of 250,000 pairs of shoes in sizes all the way from 2½ to 15, widths AAAA to EEEE. You can give customers the style they want, in the size and width desired. And because Mason Shoes are *never* sold by stores, folks must buy from you—one reason why repeat profits are often terrific!

Michigan salesman Dewitt Hutchens proudly displays new DeSoto paid for with profits from Mason sales.

R. F. Hinckley with new Nash Metropolitan made possible by *his* sales of Mason comfort Shoes.

This luxurious new Dodge was purchased by W. H. Cram, another California man, with Mason earnings.

Here's What You Do:

Send the coupon below at once and we'll set YOU up in this exciting moneymaking business the very same way we gave Delulio his start. You'll receive—FREE—a "Portable Shoe Store" Outfit with EVERYTHING you need to start making money right from your first hour. This offer may be withdrawn when we have all the men we can give factory backing—so send the coupon today. It can be your Ticket to Success like Louis Delulio's!

Mail COUPON Below TODAY

Mason Shoe Manufacturing Co., Dept. G-193
Chippewa Falls, Wis.

Please set me up in a MONEY-MAKING BUSINESS I can run from home, the same way you set up Louis Delulio and others. Rush FREE postpaid "Portable Shoe Store" Starting Outfit with EVERYTHING I need to start making extra cash the first hour!

Name_____

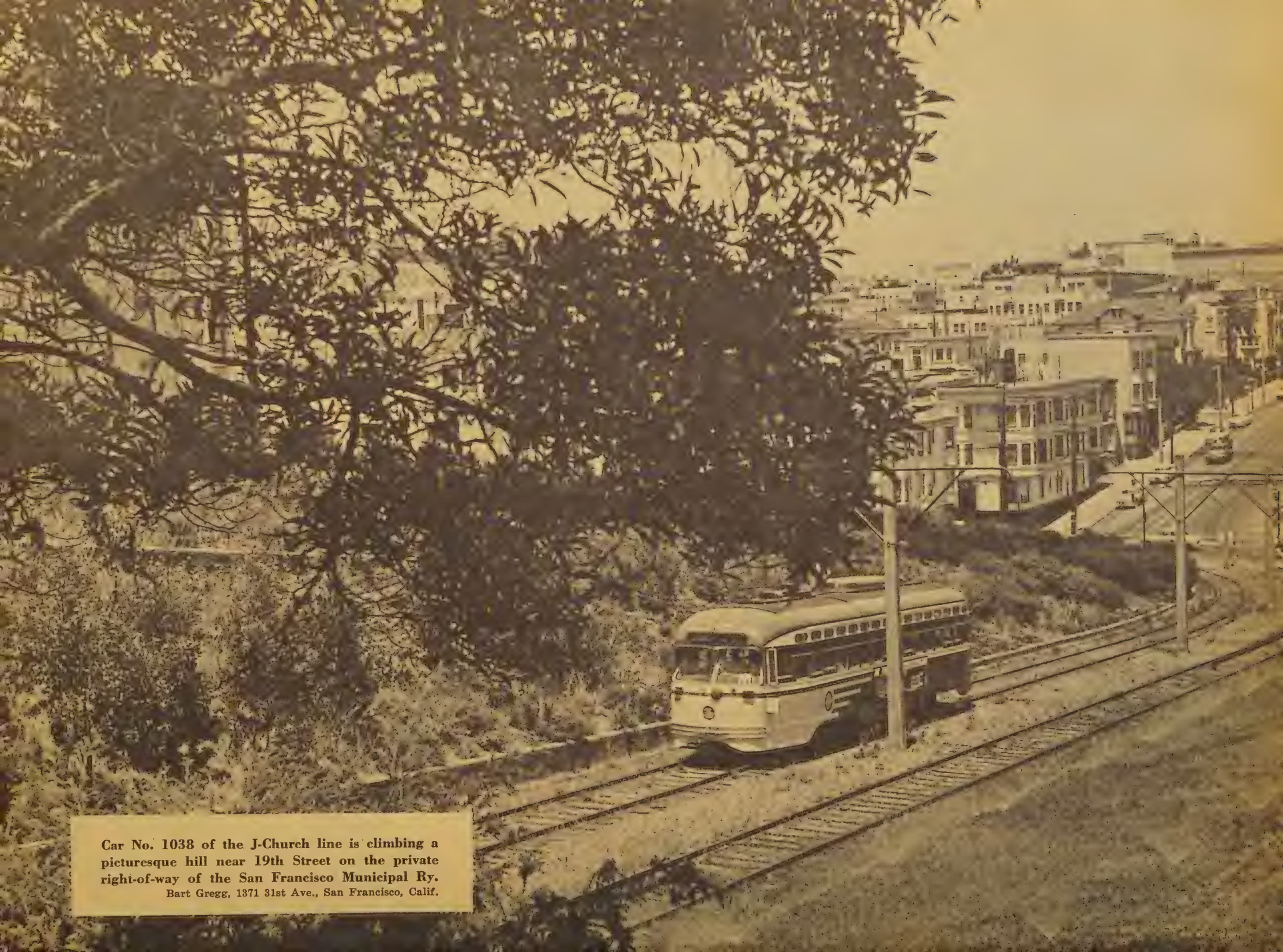
Address_____

Town_____ Zone____ State_____

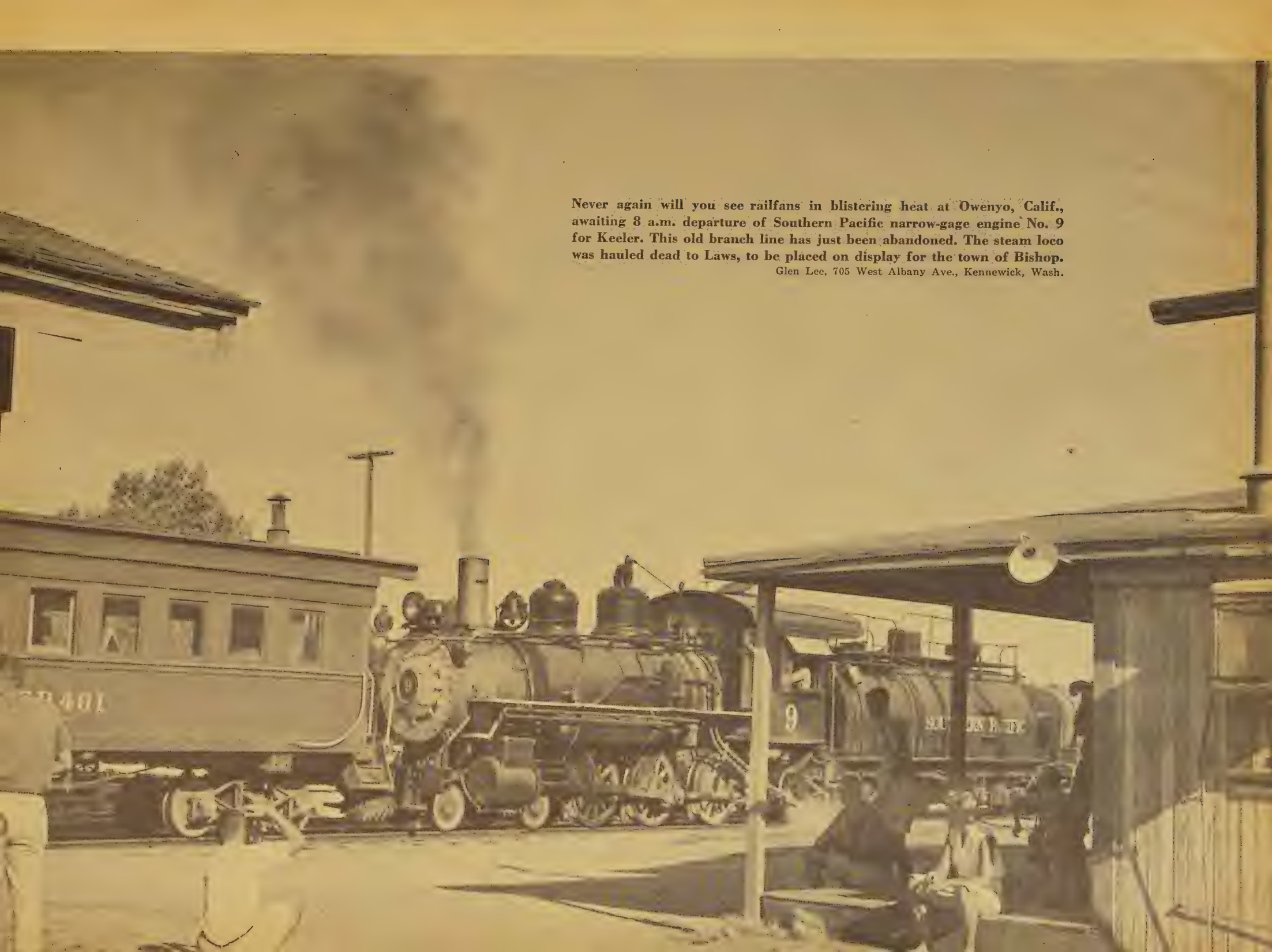
MASON SHOE MANUFACTURING CO. Dept. G-193
CHIPPEWA FALLS, WISCONSIN

Photos of the Month

Ancient railroad lanterns silhouetted against the Colorado sky through a window in the Cripple Creek Museum, a three-story building that used to be a Midland Terminal Railroad depot, filled with fascinating relics.
Ed Wojtas, 2302 Roland Dr., Champaign, Ill. (Rock Island Rocket)



Car No. 1038 of the J-Church line is climbing a picturesque hill near 19th Street on the private right-of-way of the San Francisco Municipal Ry.
Bart Gregg, 1371 31st Ave., San Francisco, Calif.



Never again will you see railfans in blistering heat at Owenyo, Calif., awaiting 8 a.m. departure of Southern Pacific narrow-gage engine No. 9 for Keeler. This old branch line has just been abandoned. The steam loco was hauled dead to Laws, to be placed on display for the town of Bishop.

Glen Lee, 705 West Albany Ave., Kennewick, Wash.

Hershey Cuban line, now electrified, began with steam engines, including the One-spot, and still uses steam occasionally.
Vitaly V. Uzoff, 1st Lt., Signal Corps, Pictorial Sec., Signal Div., Berlin Command, APO 742, New York, N. Y.

The Railway That Chocolate Bars Built

by STEPHEN D. MAGUIRE

BEHIND the candy counter or slot machine from which you buy a Hershey bar is a story of transportation. Mostly, the raw items used in this maroon-and-silver-wrapped confection (chocolate, sugar, milk, corn syrup, and nuts) plus the necessary supplies (coal for factory power, packaging materials, and so on) are shipped to the manufacturer at Hershey, Pa., over the Reading Company's double-tracked Reading-Harrisburg main line.

Although the Hershey Chocolate Corporation also makes and sells cocoa, syrup, fudge, and other sweet products, its backbone is the chocolate bar. Incoming and outbound, the Hershey plant accounts for about 11,000 carloads a year of the Reading's freight business. (Some Hershey shipments go by truck, but that's another story.) The plant's total freight bill, around $9 million a year, represents roughly 5.5 percent of Hershey's gross income from sales, and the bulk of that bill is paid to the Reading Company.

The railroad naturally is proud of this "fine industrial relationship," to quote ex-President Fisher, "with one of our oldest and most valued shippers." No wonder the Reading ran the maiden trip of its streamlined *Crusader*, years ago, to Hershey, Pa., and put on a banquet and a Broadway floor show for invited guests at the large and impressive Hershey Hotel pictured on page 18.

One of those guests, Freeman Hubbard, editor of *Railroad Magazine*, has a lively recollection of both the inaugural run and the festivities. He recalls chatting with a tall, slender, gray-haired man wearing rimless glasses and a close-cropped mustache who turned out to be Milton S. Hershey, head of the chocolate corporation.

Chocolate history has been traced back to 1519 when Hernando Cortez, the explorer and conqueror of Mexico, learned from the Aztec Indians the secret of preparing a tasty new beverage. The Emperor Montezuma served chocolate in golden goblets to his Spanish guests. This drink was made from the cacao tree and in those days you could have bought a good slave, male or female, for one hundred cacao beans.

Cortez introduced the new beverage to Europe. At first only the wealthy could afford it; but centuries later, with wider developments of the cacao tree, the price came down and today chocolate is used not merely as a drink but also in candy and many desserts. Much of its current popularity is due to Milton Hershey.

Agent gives orders to motorman of express car 410 at Casa Blanca freight station.
Stephen D. Maguire, 1411 River Rd., Belmar, N. J.

Most of the branches are freight only. There used to be a Belot-Cojimar line.

MILTON was born September 13, 1857, in Lancaster County, Pa., and at age fifteen was apprenticed to a confectioner—"a boiler of sugar," his Mennonite father snorted. Four years later he set up a little candy kitchen of his own in Philadelphia, almost next door to the Spring Garden Street station of the old Philadelphia & Reading Railway and half a mile from Baldwin Locomotive Works on the same street.

So greatly did he prosper that in 1903 he broke ground for the beginnings of the present candy factory at Hershey, Pa., on the P&R main line, and around it he laid out a model community. Among other things, he built a trolley line, Hershey Transit Company, that tapped five towns and carried freight as well as passengers. Hershey Transit had many golden years. When it passed out in 1946, a victim of highway competition, it was one of America's last rural trolley lines.*

A gargantuan user of the sweet stuff, Mr. Hershey bought a big sugar mill and 10,000 acres of sugarcane plantation in northern Cuba. That was in 1916. He enlarged the Cuban refinery, increased his holdings to 60,000 acres, and soon it was turning out 100,000 pounds of sugar a year. Inevitably, too, he built a model community there and named it Hershey.

The town has exotic charm. In fact, the whole island seems to be covered with royal palms, their fronds waving lazily in the tropical sun. You see the sloe-eyed *senoritas* with olive skin, flowers in their black hair, and bewitching smiles. You see distant hills silhouetted against the purplish profile of mountains, and the wings of incredibly beautiful birds flashing reds, greens, blues, and yellows as they fly, screeching, into the wilderness.

To link this town with the outside world, primarily to haul refined sugar to the seacoast on the first leg of its journey to the great plant at Hershey, Pa., the chocolate king constructed a railroad, some 75 miles long, which skirted the Atlantic shore from Havana and passed through the Yumuri Valley to terminate at Matanzas, about 60 miles from the Cuban capital. This

Milton S. Hershey founded a chocolate empire, built two rail lines, gave $60,000,000 to a boy's school.

*Details of Hershey Transit may be found in an illustrated feature article that I wrote for the August, 1947, issue of Railroad Magazine.

Hershey Transit Co. of Pennsylvania began operating in 1904 as the Hummelstown & Campbellstown Street Ry. Later it expanded, but was abandoned in 1946. Photos show car No. 1, car 20 outside the Hershey Hotel, and a freight shipment.

railroad was cut through tropical jungles by colored laborers imported from Jamaica.

By this time Mr. Hershey had become fabulously rich. In 1923 the world learned that he had endowed the Hershey (Pa.) Industrial School with half a million shares of stock in the chocolate company, a $60 million gift. And that represented but a fraction of his total philanthropies.

The new Cuban railway was built, you might say, from the sale of chocolate bars. At first it hauled construction material for the large mill being erected at Hershey, Cuba. Fleecy locomotive smoke curling over the tall cane made a lovely sight. Later, the railway was electrified, but when I was down there recently steam engines were being kept for stand-by service and were used occasionally on freight branches.

WHILE most of Cuba's sugarcane railroads were steam-powered in those days and ran only during the six months of cane traffic each year, Mr. Hershey decided to operate his line all year 'round for the public as well as Hershey employes, giving freight and passenger service, and to run fast interurban trains between Havana and Matanzas.

Two train dispatchers work at Hershey, Cuba. Two train sheets are spread out over the table. One controls east of Hershey, the other guides operations to the west. Besides the passenger trains shown on the sheets there are many freights, regulars and extras, as well as the work extra. Each DS handles both the main line in his district and its branches.

The steam locomotives, with smart red trim and freshly shined brass, were a joy to behold. But the island's hilly terrain, with some heavy grades, prompted the decision to electrify. At that time electricity was considered the logical successor to steam propulsion. Mr. Hershey bought fifteen big, red, interurban cars from the Brill Company. Even today those same cars have floor plates showing they were built in 1911, years before Hershey purchased them—I don't know why. There were ten passenger cars, three combines, and two freight motors. The first order also included a line car. The steam-coach-type roofs on those cars were good for ventilation, except for the times when tropical showers and hurricanes flooded the interiors.

The trolley voltage is 1200 direct current. The contact wire is size 0000 copper, grooved and hung from extra-galvanized, steel, messenger cable with strands 7/16 of an inch in diameter. It is hung by an average of ten suspenders between poles. The hardwood poles are spaced about 100 feet apart.

There are two remotely located substations along the line. One is the portable mercury rectifier automatic job to the west, the other being a rotary-converter fixed substation at Margor to the east. These two supply the outer extremities of the system, while other rotary-converter substation equipment situated at the main power plant takes care of the central portion.

Most of the passenger stations are simple wooden shelters. At Hershey there is a large stucco depot and freight office. Casa Blanca has a small ticket booth. Matzanas boasts a trainshed with a modern station and freight office.

The cars of the old chocolate-bar line are kept up fairly well. When I was there in February I saw no new paint jobs, neither did I see cars that needed paint badly. There are rattan seats. Motormen and conductors wear olive-green uniforms and the passengers look about the same as those I have often seen in New York subways.

Today the line has four through trains plus three Casa Blanca-Hershey runs, at about the same speed as when the service began October 5, 1922, with six through runs daily averaging 25 miles per hour. There are also several rush-hour cars on various branches out of Hershey. The Casa Blanca runs use heavy steel interurban equipment built by J. G. Brill nearly half a century ago. The fare between Casa Blanca and Matanzas is $1.40 in Cuban or American money, with a special rate for one-day round trips.

STRANGE as it seems in this era of motor vehicles, the Hershey Cuban Railway is still an old-fashioned interurban, the only one left on our hemisphere—or anywhere else, for all I know. You can reach it in a 90-minute airplane trip from Miami, Florida.

Traction lines with many interurban characteristics are still running out of Chicago, and one out of Los Angeles, while two are left in South America, out of Buenos Aires, Argentina, and

Photograph by the author

Richard H. Steinmetz

Santiago, Chile, respectively. None of them closely resembles the interurbans we knew years ago: big, old, wooden cars equipped with wooden pilots, running at high speed through the open countryside.

Cuba still boasts many steam roads, while several lines give passenger service with diesel-electrics and diesel motor cars, but Hershey Cuban is the lone interurban. The only other electric line in Fidel Castro's domain is a freight switching operation between Havana Union Station and the railroad car-ferry of the nearby West India Fruit & Steamship Company that runs daily to Palm Beach, Fla., where the freight cars are switched to Florida East Coast tracks.

Electric locomotives shunt the cars onto and off of the boats at Havana, while diesel units of the West Palm Beach Terminal Railroad perform a similar service at Palm Beach.

Besides the plane trip I have mentioned, you could reach Hershey Cuban from the United States mainland by taking a daytime ferry out of Key West or a longer trip (17 hours) by car-ferry from Palm Beach, the loading point for all freight cars to Cuba. Originally the cars were ferried across the deep water from Key West.

Railfans would enjoy the *New Grand Haven*, newest ship in the car-ferry fleet, that crosses daily to and from Cuba, often with as many as fifty freight cars on her lower deck. She has five spacious cabins for passengers. In clear weather, riding the Gulf Stream right into Havana harbor is pleasantly smooth. Afternoon departures from Palm Beach reach Havana late the next morning. The trip is most enjoyable.

The chocolate-bar railway doesn't enter Havana. Its main line terminates in picturesque Casa Blanca, just across the harbor in which the sinking of the United States battleship *Maine* precipitated the Spanish-American War. You can get there on small passenger launches that ply the bluish-green water at frequent intervals.

Since the main line offers only four round trips daily, Casa Blanca has little railroad activity. A suburban branch running from there to Cojimar was abandoned to buses about three years ago. The Hershey cars terminate in the middle of a narrow street lined with quaint Spanish-style buildings, all very old and dilapidated. By contrast, the trolleys of 1911 vintage appear relatively modern.

TRAINS may consist of a single car, maybe two or three. Often a motorized express car trails at the end, carrying LCL shipments. From Casa Blanca to Matanzas the line runs through one sugar plantation after another but no large town. Even Hershey, site of the giant refinery, is essentially a small settlement for plant employes, with only one big hotel and company stores. Main-line freight is mostly cane. Electric locomotives pick up the open-sided cars with cane sticks poking out all over and whisk them to the refinery.

As for passenger service, once you board the big, wooden, MU cars with green stained-glass windows and gold-leaf lettering on the maroon bodies, you are back in the hey-day of interurbans, the half-forgotten yesterdays when horse-drawn wagons still rattled over cobblestones. The pantographs are raised. You hear the compressors pumping up the reservoirs.

While I was riding back from Matanzas on the last through train of the day I saw field hands toiling far past what I had always regarded as supper-time. To meet another car, after dark,

A glimpse of the gigantic sugar refinery that the Hershey company built in Cuba.

(Above) A Hershey Cuban three-car train, with an express car in the center, at the Casa Blanca terminus after a heavy tropical downpour. (Below) No. 211, one of the heavy steel interurban cars built by J. G. Brill nearly a half-century ago.

Photograph by the author

1st Lt. Vitaly V. Uzoff

Train consisting of cars 151 and 110 waiting at Hershey to begin run to Jaruco.

we backed into a siding. Tropical Cuba is warm even in February and most of the train windows were open. Well, when we stopped on the sidetrack, with overhead lights on, the darnedest collection of flies, moths, and gnats, humming and buzzing, descended upon us from the fields and I wondered how the laborers we had seen could work in such a cloud of flying pests.

I got out to watch the other car as it drew near and passed us. Hershey cars carry front headlights on the right side, not in the middle like American interurbans. Seeing the car approach with a headlight beam far off-center reminded me how far I was from home.

Despite the international complications which have arisen under the Castro regime, I had no trouble on the Hershey Cuban line but was treated everywhere with courtesy. The fact that I do not speak Spanish did not spoil my enjoyment of the trip. But I advise English-speaking railfans to get a timetable beforehand. Better yet, contact the company before you go to Cuba. Ask for a map of the line and information about the service at shift changes, which is really unusual.

In 1958 the Hershey Cuban Railway was buying the only pieces of equipment left on the abandoned Toledo & Western—electric locomotives Nos. 80 and 81, freight motors numbered 40, 50, and 90—but before delivery could be made the Castro revolution of 1959 canceled the deal.

Even so, the line is doing rather well. The philanthropic old chocolate king died October 13, 1945, one month after his 88th birthday, and the Hershey Corporation sold all of its Cuban holdings to native tycoons. But the railway continues to roll a heavy tonnage of refined sugar to the coast for shipment to the well-known plant at Hershey, Pa.

Question: Did you ever see a paid advertisement of Hershey bars in any magazine or newspaper or hear one on TV or radio? I never did. Apparently the product is so well known that advertising would only "gild the lily."

Getting back to the rails, Latin-American uprisings have been known to harm trolley lines. Ten years ago revolutionists in Bogota, Columbia, vented their anger against their own streetcars, toppling and burning them, and thus in a day's rioting brought about the end of rail operation there. Luckily, no such thing has happened on the Island of Cuba to the railway built by chocolate bars.

2-10-2's and THEIR KIN

by H. L. KELSO

This article is the second in a series on ten-coupled engines. We see here a 2-10-2, Chicago & Illinois Midland No. 757, Class H-2 (ex-ACL), wheeling an Extra South over the Sangamon River en route from Peoria to Springfield in 1955.
R. R. Malinoski, 246 Madison Ave., New Milford, N. J.

YOU may have read my previous article dealing mostly with the Santa Fe type, the 2-10-2. This mighty freight-hauler was the forerunner of even greater locomotives equipped with ten driving wheels. From it stemmed the powerful 4-10-2's and 2-10-4's and other ten-coupled varieties, including the 0-10-2 transfer engines which made history on the Union Railroad in the Pittsburgh steel-producing area. And in Soviet Russia, which boasts the world's largest rail system under one management, the 2-10-2 actually evolved into a very efficient 2-10-6!

Now, here is an oddity worth mentioning: all of the Canadian National's 2-10-2's were built expressly for service on its *Eastern* lines. Conversely—why, we don't know—all of the Canadian Pacific's ten-coupled engines were used only on its *Western* mileage.

R. L. Kennedy, who lives in Toronto and is president of Railfans Unlimited, reports that no Canadian Pacific 2-10-2 ever ran east of Fort Williams, a "fur piece" west of his home town. The CPR's all-time roster shows only fifteen Santa Fe types, the first one acquired in 1915, the last one scrapped in April, 1959. That is a long span, forty years of useful service. The CPR also had some 2-10-4's, semi-streamlined Selkirks. More about them later.

Reverting to the Canadian National, I quote William J. Parry, the now-retired CNR hogger and railroad author. On his recent California visit we got talking about 2-10-2's and he said:

"I became acquainted with the Santa Fe type at the Toronto terminals in the summer of 1929 just as the big depression was coming on. In those worried days I could no longer hold a job of running engines out of Windsor, my home terminal, so with my trusty toolbox I made the rounds of various terminals in search of employment based on my seniority.

"At that time Canadian National 2-10-2's were assigned to pilot jobs (helper and doubleheading) and spent their entire existence on such runs out of Toronto. Being the heaviest engines on the road, they were preferred by firemen and engineers alike because salaries were figured on the basis of weight on drivers.

"One evening I was called for the Danforth pilot, a 2-10-2 job, and, as was my practice, I tested the airbrakes for piston travel. The brakes applied all right on the leading drivers but, strangely enough, not on the following wheels. After numerous brake applications I found the cause of the trouble, adjusted it barely in time to couple into a big Northern type (4-8-4), and we

The mighty 3000, a 2-10-2, pushes the rear of a Reading coal drag from Shamokin to St. Nicholas, Pa. (Feb. 15, 1952)
R. R. Malinoski

Oddly enough, all of the Canadian National's Santa Fe types, such as No. 4100, shown here, were built solely for operation on its Eastern lines.

doubleheaded out of town with a Montreal-bound hotshot.

"On the road, that 2-10-2 performed beautifully. Nothing in the present dieselized age can convey a thrill comparable to that of showering cinders over the countryside from Danforth to Scarborough Junction. In all my railroad memories, the 2-10-2 is my favortie engine."

The CNR had a total of 75 Santa Fe's in service, which indicates what their motive power officials thought of that type. This excerpt from *Bulletin* 41 of the Upper Canada Railway Society sheds light on the subject:

While the 2-10-2's on the CNR have spent most of their lives in the comparatively monotonous routine of helper service (around Toronto) some colorful jobs have not passed them by. A story is told that when the old Toronto Union Station was being demolished, the station's big tower was brought down by the brute pulling power of a 2-10-2. Then again, in the hot days of competition between CNR and CPR for the Toronto-Montreal passenger business, it was considered very desirable to sprinkle the track between Scarborough and Toronto immedately before the passage of a crack train between the two cities. This was a routine job for the 2-10-2's, some of them being equipped with tank sprinklers attached to their tenders. This menial but unique task was done away with in 1933 when the two roads inaugurated pool service between the two cities.

A sterling railfan champion of 2-10-2's, R. R. Malinoski of New Milford, N. J., tells me some of his experiences in photographing that type on fourteen different roads in the East and West and in Canada "while chasing steam engines" for more than twenty years.

He mentions the Santa Fe, B&O, CNR, C&IM, C&O, C&S, DM&IR, Erie, IC, LV, Reading, Rock Island, SP, and UP. (Among the other roads which used 2-10-2's are the ACL, BRC, B&LE, Burlington, CPR, C&EI, C&GW, GN, KCS, MP, New Haven, NYO&W, Pennsy, Southern, T&NO, T&P, and Wabash.) Although the type is usually associated with drag freight, helper or pusher service, Malinoski found some of them pulling fast freight and even passenger trains.

HE WRITES: "My first recollection of them was as a teen-ager in the late 1930's. A Lehigh Valley eastbound ore train with a brace of 2-10-2's was leaving Mt. Carmel, Pa., for Delano, once a famous railroad town, and then Lehighton and eventually the Bethlehem Steel Mill. The 'Valley' liked to haul about sixty cars of iron ore to a

A Southern Pacific 2-10-2 type, No. 3711, and (in background) a 4-8-4 prepare to couple into train No. 71 at San Luis Obispo, Calif., for a westbound run.
Photographed by the author in 1955

Pennsy 2-10-0's, Nos. 4528 and 4610, wheeling ore to Mt. Carmel, Pa. (1955)
Bud Rothaar, 757 Pierpont St., Rahway, N. J.

train weighing about 5700 tons. Such a train required five engines, maybe two or three 2-10-2's and the rest 2-8-2's. I was greatly impressed with their ability to get that ore up the hill. On rare occasions they stalled, but I think they always got the train through without resorting to further help or doubling. These engines operated out of Delano, Lehighton, and Coxton, where the grades were stiffest."

The next 2-10-2's that Malinoski saw were on the Erie in helper and pusher service east out of Susquehanna, Pa., over the famous Starrucca Viaduct to Gulf Summit.

"One pleasant April day in 1949," he recalls, "I rode an Erie time freight from Avoca to Susquehanna. Our engine was a 2-8-4, No. 3378, with 42 cars to Carbondale. We were then given 19 more cars and 2-10-2 type No. 4207 for a pusher. It was thrilling to ride the caboose cupola right ahead of that blasting stack to the top of the grade at Ararat."

Malinoski served in the U. S. Army Air Force during World War II and while stationed at Clovis, N. M., he saw some dandy Santa Fe 3800's, which, however, were shoved in the background by the arrival of new 2-10-4's and 4-8-4's.

"Between 1946 and '57 I saw a lot of Baltimore & Ohio 'Big Sixes.' I cherish the memory of a May afternoon in 1957 when a fast freight came barreling through Sullivan, Ohio, doing every

B&O 6113 and 6222 push Extra West up Sand Patch grade at Manila, Pa. (1956)

Pennsy engines 4233 and 4243 working up grade toward Weigh Scales, Pa. Note Reading Co. line in background. (1955)
Photographs on these two pages by R. R. Malinoski

bit of 60 miles per hour. Another remarkable B&O fast freight, which pulled out of Warwick, Ohio, consisted of engine 527, a 2-10-2, and 161 cars that weighed over 8400 tons. Only an engine with guts could wheel such a train."

A trip to the Kansas City area in the fall of 1926 permitted our correspondent to photograph other 2-10-2's. "I came upon my first engine of the Santa Fe's 3900 series on a Sunday afternoon at Olathe, Kansas," he recalls. "She was a freight engine waiting in the hole for No. 7, the Fast Mail Express; and after the Mail had roared by, you should have seen how fast she left that siding with 99 cars. Only a truly good engine, well maintained and handled by a throttle artist, could have done it.

"The Duluth, Missabe & Iron Range, owned and operated by the United States Steel Corp., had a versatile series of 2-10-2's that could be used successfully on any job. I snapped a few of them at the Proctor, Minn., engine terminal in 1954. Some were still in service as recently as 1959, attesting to the high regard in which motive-power officials held them."

Turning to Reading 2-10-2's, Malinoski digs into history. Numbers 3000 to 3010 were rebuilt from old 2-8-8-2 Mallets, beginning in 1927. At that time they were the heaviest and most powerful engines in the country—engine weight 439,800 pounds, tractive effort 90,500 pounds. No. 3010 was the oddball of the lot, equipped with a Caprotti valve gear, a poppet-valve type, which because of excessive repair costs was changed eventually to a Walschaert.

In 1931 Baldwin built Nos. 3011 to 3020. Those 21 engines operated in fast freight between Rutherford yard near Harrisburg, Pa., and the Bethlehem-Allentown area. When 4-8-4's and diesels bumped them, they were sent to Shamokin and Gordon for mine runs, coal and pusher train service. They often doubleheaded trains of forty or so cars of *Eastern* coal out of Shamokin. However, it took three such engines to move that much *Western* coal out of Gordon up the 2.6 percent grade to Locust Summit.

As for the Chicago & Illinois Midland, our correspondent recalls a rainy May afternoon in 1955 when he stopped off at the Topeka, Ill., depot.

"The agent said the 751 was coming through on an extra south for Springfield. I expected a drag freight, but 751 was doing well over a mile a minute. My eyes popped. That was the fastest trip, without a doubt, of any 2-10-2 I've ever seen."

The C&IM had an interesting stable of 2-10-2's. Numbers 600 to 603 were built by Baldwin in 1927 and '29, and the 700 to 703 by Lima in '31. The same road got some second-hand power, namely 651 to 659 (Alco, 1917) from the Wabash and 751 to 759 (Baldwin, 1925) from the Atlantic Coast Line.

There is a 1.64 percent grade in Illinois known as Petersburg hill, which the heavy northbound C&IM coal trains had to double or even triple. Malinoski saw the 754 make three trips before getting its 65 cars over the hump. It could take only nineteen cars of coal, roughly 2000 tons, on the first two trips. That day he got pictures of five different 2-10-2's in action.

"Bluford, Ill., and Paducah, Ky., were good places to see the Illinois Central's 2-10-2's," he continues. "They were, perhaps, the most powerful of all 2-10-2's. The 2700's had a tractive force of 96,000 pounds while the 2800's rated 104,000 pounds. They handled some long and heavy coal trains in that hilly section. The 2807 is still being used frequently out of Paducah. She was the last of her type to operate in this country.

"On October 5, 1958, I got my final shot of a 2-10-2. Colorado & Southern No. 902 had left Cheyenne, Wyo., during the night on a Wheatland turn. I caught up with her at Chugwater on the trip back. The engineer reported something wrong with the engine. The dispatcher was concerned as to whether or not they would make it back to Cheyenne. The engineer wanted to get home, so he talked the DS into authorizing the trip, and he just about ran the wheels off the engine. I have seen very few 2-10-2's, even in good shape, run that fast. It was a fitting climax to my experiences with the great Santa Fe type."

WHAT happened to the 2-10-2 in the evolution of the steam locomotive? Actually, nothing at all. The Santa Fe type remained extant in the final days of steam power in America.

Missouri Pacific 2-10-2 No. 1717, helper service, Tower Grove to Kirkwood, Mo.
David Plowden, 1239 Madison Ave., New York 28, N. Y.

However, more powerful and finer engines with ten drivers became famous. Heading the list was the 2-10-4, which was undoubtedly the most efficient ten-coupled breed of the iron horse. But before that type became very popular many experimental engines were built. This brings us again to Samuel M. Vauclain, who next to old Matthias Baldwin himself, was the most illustrious figure in the history of Baldwin Locomotive Works.

Sam Vauclain seldom made a mistake. But on one occasion, at least, he guessed wrong. The 60,000, a 4-10-2, is a monument to his genius in reverse. Vauclain regarded that engine as a successor to the 2-10-2, and in building her he did himself proud. In fact, the 60,000 did everything he claimed she would do. But no railroad would ever buy her nor place any orders for that design. You can see her any day at the Franklin Institute on Benjamin Franklin Parkway at 20th Street in Philadelphia. Behind that exhibit is quite a story.

This engine, built at great expense by the Baldwin Works, repeatedly demonstrated her efficiency and pulling power on several railroads. Even so, no road would order that particular design.

If the 60,000 could talk, she'd probably tell you how her three-cylindered exhaust once blasted through lonely snowsheds in the high Sierras, how she wrote her signature in black plumbago on the roof of Raton tunnel, sanded Nebraska's prairie rails, and threaded endless switches in Chicago—yes, and canted to the Pennsy's Horseshoe Curve. But that's all over now. All she can do is roll a trifle on the museum exhibition track when novices tug at her inverted throttle.

This Baldwin-built boomer began her career on a drafting table in 1926. The Works was going to build its sixty-thousandth locomotive. Big Sam Vauclain, dynamic boss of Eddystone, called for a super-engine of the plant's own design. She was to incorporate not only the most recent developments in steam locomotion but also certain devices and structural changes based upon theory and therefore not acceptable to railway managements.

Old Matthias Baldwin had never forgotten the flood of orders inspired by the performance of No. 82, a compound demonstration engine built in 1901. Neither had the designers given up thoughts of further experimentation in the field of compounding. That is to say, the re-employment of steam exhausted from one or more high-pressure cylinders to motivate the pistons of a second or low-pressure set, before it is passed on to the atmosphere.

While the principle itself was sound and made for economical operation, the older types of compound engine had long since lost their popularity. For the initial and maintenance costs were high and the conservation of steam was of less importance in a day of superheaters, feedwater heaters, and automatic stokers.

Baldwin men believed, however, that such aids to "thermal" efficiency could well be made to compliment—rather than supplant—compounding. Furthermore, a better distribution of piston thrust could be obtained by using an additional cylinder, main-rod-connected to an axle crank between the frames, as already proven by the performances of three-cylindered single-expansion engines on the Southern Pacific, the Union Pacific, the Lehigh Valley, and the Lackawanna.

SPECIFICATIONS called for a central high-pressure cylinder applying power to the 60,000's second axle and exhausting to the low-pressure cylinders outside. These, in turn, worked on the third pair of drivers. An outside steam pipe, over each low-pressure cylinder's valve-chest, carried the exhaust steam into the smokebox for expulsion through the stack. This arrangement was contrary to general practice, wherein these outside pipes convey live steam into the cylinders.

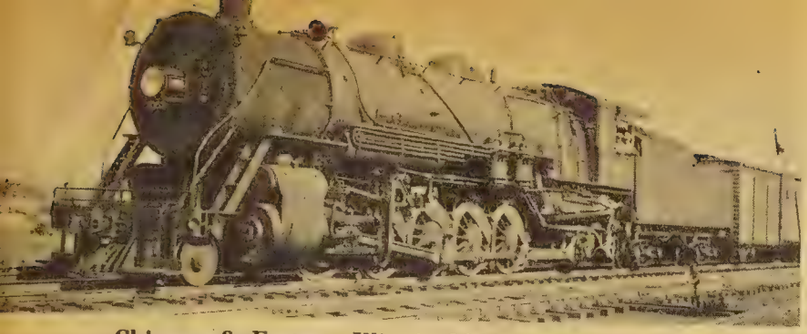
Walschaert valve motion was employed, with separate action for each cylinder, though all were controlled by one reverse gear. Since the points of cutoff vary in the high- and low-pressure cylinders of a compound engine, the valve-setting job was anything but a pushover.

An operating pressure of 350 pounds to the square inch had been decided upon. To withstand this force, the firebox section of the boiler (generally its weakest point) required special consideration. It was felt that the water-tube type, with its freedom from stay-bolt leakage and breakage, would be best.

The boiler barrel was of the "wagon-top" design, with the first two courses straight, and the third coned on the top. Two large drums protruded from the tube sheet of this conical course, and water tubes connected them to an enormous mud ring formed from a hollow steel casting.

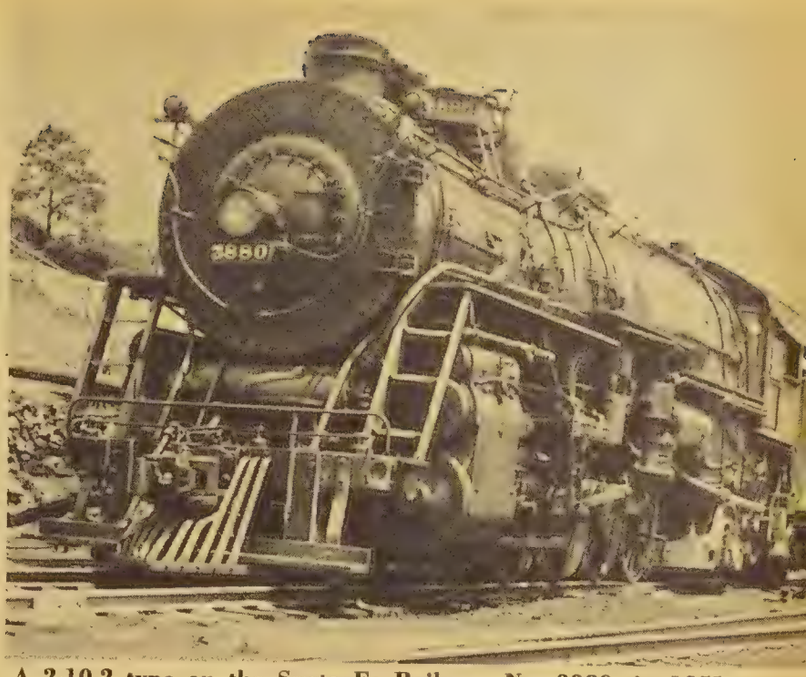
Obviously, a locomotive with such physical characteristics could develop great power. It was decided, therefore, to spread the heavy adhesive weight, required to prevent slipping, over five pairs of driving wheels.

Speed was a prime requisite, hence the employment of four pony wheels. The trailing truck was of a standard single-axle type, with provision made for the application of a booster, should additional starting tractive effort later



Chicago & Eastern Illinois 2003 became C&O No. 2003.
Jack Avery photo from Charles E. Winters collection

Reading locomotive 1129, Class J-1sa, a 2-10-0 type, at Reading, Pa., in 1935.
C. J. Regensburger, 2145 N. 3rd St., Philadelphia, Pa.



A 2-10-2 type on the Santa Fe Railway, No. 3380, in 1951.
David Plowden

seem advisable for the mighty giant.

At last the 60,000, fresh in new paint and hairline striping, stood ready for the road. She bore a rather strong resemblance to Southern Pacific motive power, even her tank being of the SP Vanderbilt style.

But it was in the Pennsylvania's famed Altoona testing plant that 60,000 first gave evidence of her potentialities. Those who saw the giant S-1 pawing the rollers with her drivers at the New York World's Fair twenty years ago can conjure up the picture Baldwin's boomer made as she struck out at the glorified treadmill under her, apparently anxious to be off through the nearest brick wall.

Soon she was cutting capers. At the relatively low speed of 37½ miles an hour, she reached the capacity of the plant, with 4515 indicated horsepower! Her water-tube firebox at the same time proved itself capable of evaporating over 84,000 pounds of water per hour, thus breaking another plant record.

Furthermore, the weight of her moving machinery was so well distributed that there was no need for special changes in counterbalancing, usually necessary before the making of such tests. The employment of the third cylinder registered a material reduction in vibration and a nearer approach to constant torque.

Following the Altoona workout, 60,000 went into service on the Trenton cutoff and low-grade freight line of the Pennsylvania Railroad, running between West Morrisville and Enola, Pa. Here she hauled freight trains of over 100 cars and 7000 tons weight, at huge savings over conventional engines in fuel consumption.

On the B&O she outperformed a handsome 2-10-2 on the back-breaking Sand Patch grade. The Erie got her next and sent her into the Windy City. Burlington tests followed, and at Fort Madison, Iowa, a delegation of Santa Fe brass collars crowded into a dynamometer car to check the gages.

Down in New Mexico, 60,000 got her first taste of fuel oil when a standard Southern Pacific tender was coupled on. Then, boomer-fashion, she ran afoul the law. An Interstate Commerce Commission inspector objected to her high boiler pressure, 350 pounds, and halted briefly her tour of triumph.

Technical difficulties ironed out, the big girl went to work on the Sacramento Division, with its 2½ percent grades draped in successions of reverse curves over the Sierra Nevadas. True to predictions, she topped them, unassisted, with passenger trains of customary operating weight.

A personal appearance in Portland, Ore., wound up the West Coast tour. Then back she went to a soft-coal diet on the Great Northern, and home again via the "Q" and the Pennsy.

Just what had her performance proved? Certainly that she was powerful, economical of fuel, and easy on the rails. But no orders came for locomotives of a like design. Motive power officials voiced the same objections they had raised with regard to previous compound engines. Initial cost and maintenance charges were too high.

FOR THOSE not acquainted with the term, we point out that a *compound* locomotive is one that twice uses the steam generated by her boiler. The steam is used first in the so-called high-pressure cylinders and is then exhausted into low-pressure cylinders (necessarily larger in diameter and cubic inches) before it is exhausted out of the smokestack. A *simple* engine receives steam to all cylinders, regardless of how many, directly from the boiler.

Long ago, the *compound* was considered more economical, but later her maintenance cost was found to be far greater than that of the *simple* engine. This finding refers to North America. Some European countries continue to favor the *compound* locomotive, due perhaps to the difference in operating conditions as well as to the unique approach to steam efficiency evidenced by European locomotive designers.

Now we find the real reason why Vauclain's great compound 4-10-2 never became salable. It had to do with the great Lima-built 2-10-4's on the Texas & Pacific. Incidentally, the 2-10-4 is better known as the Texas type locomotive, the T&P having been the first road to adopt them in volume. A total of seventy such machines graced the T&P roster. Replacing 2-10-2's built prior to 1920, they increased trainload by 45 percent and speed over a division by 33 percent. Add to this 37 percent saving in fuel and you'll understand

Comparisons of Some Large American 2-10-4's

Railroad	T&P	AT&SF	AT&SF	B&LE	C&O	CB&Q
Builder	Lima	BLW	BLW	Alco	Lima	BLW
Engine weight	458,000	502,260	545,260	520,000	566,000	511,710
Drive wheel dia.	63	69	74	64	69	64
Steam pressure	255	300	310	250	260	250
Cylinders	29x32	30x34	30x34	31x32	29x34	31x32
Tractive effort		93,000	93,000			90,000
Tractive effort with booster	97,900	none	none	110,400	106,584	none
Date built	1929	1930	1937,'44	1937	1930	1927-29

(Roads listed here are Texas & Pacific, Santa Fe, Bessemer & Lake Erie, Chesapeake & Ohio, and Burlington. The Pennsy 2-10-4's do not appear here because they were among the last engines of the type to go into service.)

Baldwin's 60,000 will spend all of her tomorrows as an exhibit at the Franklin Institute, Philadelphia, enjoyed by kids.

why their performances impressed motive power men.

On the Santa Fe Railway the 2-10-4's, operating over a mountain divide on test runs, proved their superiority over the road's 2-10-2's. Although they did not mark up a saving, percentage-wise, as great as those on the T&P, they did pay handsome dividends on the company's investment.

The Santa Fe's first 2-10-4 was No. 5000, affectionately known to engine crews as "Madame Queen." Baldwin-built, as were nearly all Santa Fe engines, she went into service in 1930. She weighed in working order (engine alone) 502,260 pounds and sported 62-inch driving wheels.

It is not quite true to say that she was the Santa Fe's first 2-10-4. That same road's 3819 was equipped with a four-wheel trailer truck, which, however, had no significance in the development of 2-10-4's.

The big, speedy 5000 rated a tractive effort of 93,000 pounds without a booster. After seven years of service she took a back seat to ten new and more efficient 2-10-4's. These went into service in 1937. Weighing 545,260 pounds (engine alone) they represent the most powerful and heaviest rigid-framed of all AT&SF engines. They had 30x34-inch cylinders, 74-inch drivers, and 310 pounds boiler pressure.

Seldom in our delvings into locomotive data have we noted a piston stroke of 34 inches! Does any reader know

Lehigh & New England 2-10-0 No. 403 westbound on Pen Argyl turnaround with 35 hoppers at Lehigh Gap, Pa. (1947)
R. R. Malinoski

Central Vermont 2-10-4 No. 707 moving off the turntable at White River Junction.
David Plowden

of engines with a longer stroke, excepting those on the C&O and the Pennsy? And who has heard of locomotives designed for freight service with larger than 74-inch drivers?

In 1944 the Santa Fe purchased twenty-five huge 2-10-4's from Baldwin, which, along with 2900 Class 4-8-4's, were the last steamers they ever bought.

EACH and every 2-10-4, regardless of builder, was well-proportioned and beautiful, and was powerful, especially the semi-streamlined ones that hauled Canadian Pacific freight and passengers over the Selkirk Mountains. CPR 2-10-4's were known as Selkirks. Compared with American 2-10-4's, they were lighter in engine weight (447,000 pounds), with relatively small cylinders (25x32) and 63-inch drivers. Their tractive effort rated but 77,000 pounds, but a booster on the trailer wheeled upped the figure to 89,000. In passenger runs they handled 1100-ton trains of twelve steel cars over a 2.2 percent mountain grade.

The CPR listed a total of 36 Selkirks, only the last ten being semi-streamlined. The first ones went into service in 1929; the last ten in '49. All were built by the Montreal Works and numbered in the 5900 series. No. 5935 was the very last steamer CPR acquired.

Another great Canadian 2-10-4 was No. 8000, an experimental giant that weighed 485,000 pounds, heaviest locomotive ever owned by a Canadian road. She was a three-cylinder oilburner with the Schmidt method of steam distribution, a system also known as the double-pressure type. No. 8000, had 15½x28-inch high-pressure cylinders and one 24x30-inch low-pressure cylinder. Boiler pressures of 850 and 250 pounds respectively. Regardless of all this, the unusual giant rated but a 90,000-pound tractive effort. After a span of nine years she was scrapped in 1940.

Getting back to 2-10-4's in the United States, we find that those Lima built for the Chesapeake & Ohio were the mightest and heaviest of them all—until the Pennsy came out with the world's most powerful 2-10-4.

Built at Juniata shops in 1942, the Pennsy leviathans weighed 572,640 pounds apiece and developed a tremendous tractive effort of 108,750 pounds. The driver diameter was 70 inches; the cylinders measured 29x34. Aside from minor variations, they were patterned after C&O engines of the type.

Just as I am winding up this article a letter comes from Forest A. Cox, Box 612, Bonners Ferry, Idaho, which says: "Some years ago I was working on the Grand Coulee Dam as master mechanic and a locomotive engineer, delivering and assembling engines used on the project. The last one put in service there was a saddle-tank 2-10-2 which had come from the Minetta logging road in California. She was a modern machine with a boiler pressure of 210 pounds to the square inch. She would handle many cars, but we had a problem getting her back home after a run. That was because our thirty-mile railroad had no sidetrack nor water tank. Three other locomotives used on the job had big tanks."

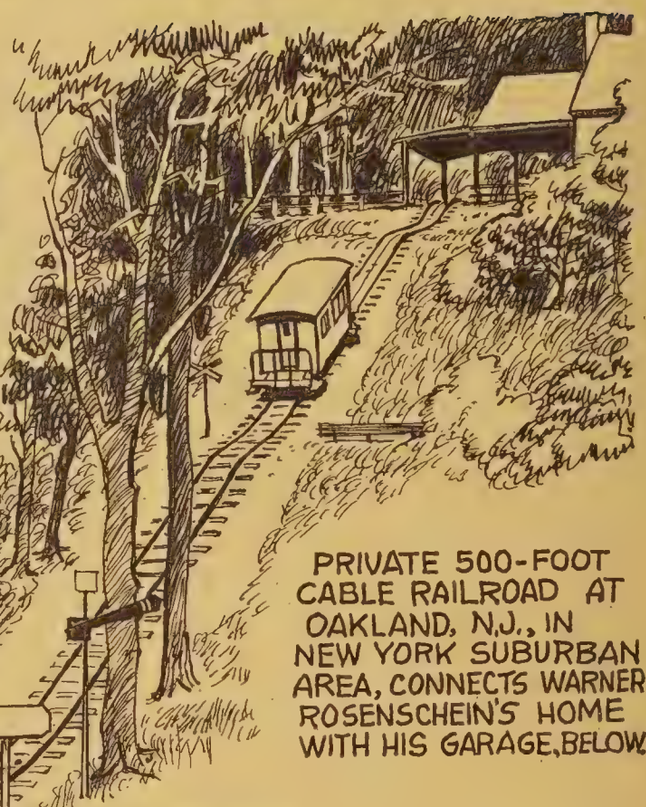
Well, that's it for now. Our next article will take up some interesting 2-10-4's on the Chicago Great Western, the Kansas City Southern, and the Bessemer & Lake Erie as well as the 4-10-2's on the Southern Pacific and Union Pacific. You may also look forward to an account of the 2-10-0, or Decapod type. And who remembers *El Gobernador*, the famous 4-10-0 that plied the shining rails in the SP's early days? ●

Joseph A. Mannix, 33-18 161st St., Flushing, L. I., N. Y.
No. 4190, Canadian National's last 2-10-2 (Feb. '59), is now being preserved by Canadian Railroad Historical Association.

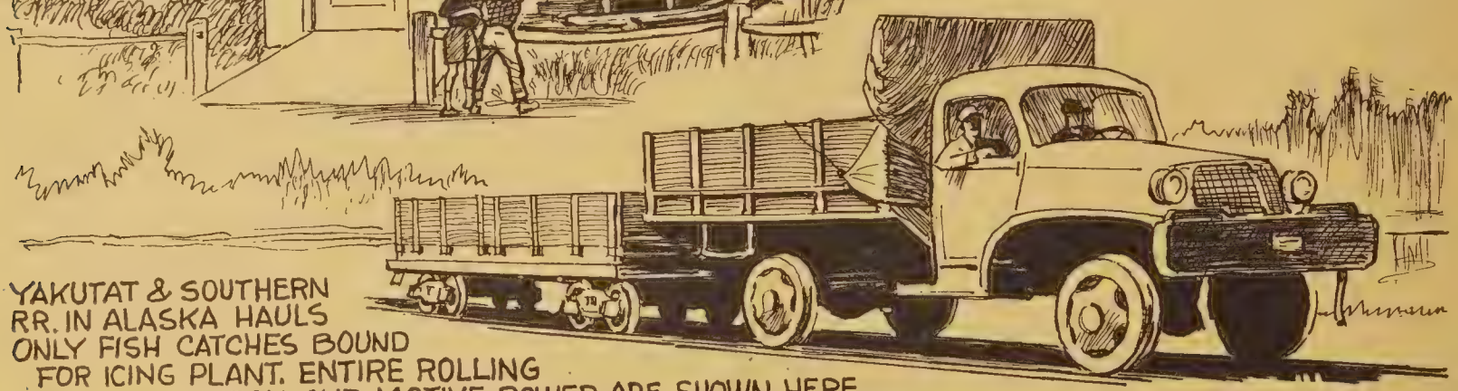
Along the Iron Pike

by Joe Easley

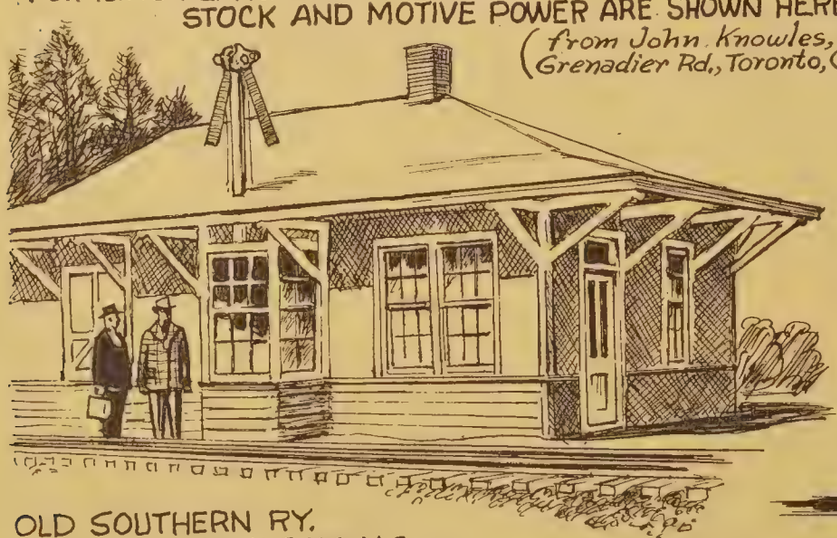
FREAK WRECK ON OLD CHICAGO & ALTON NEAR LEXINGTON, ILL., IN ABOUT 1895: EIGHT-WHEELER NO. 205 RAMMED STANDING FREIGHT TRAIN AND CLIMBED ATOP COAL CARS.



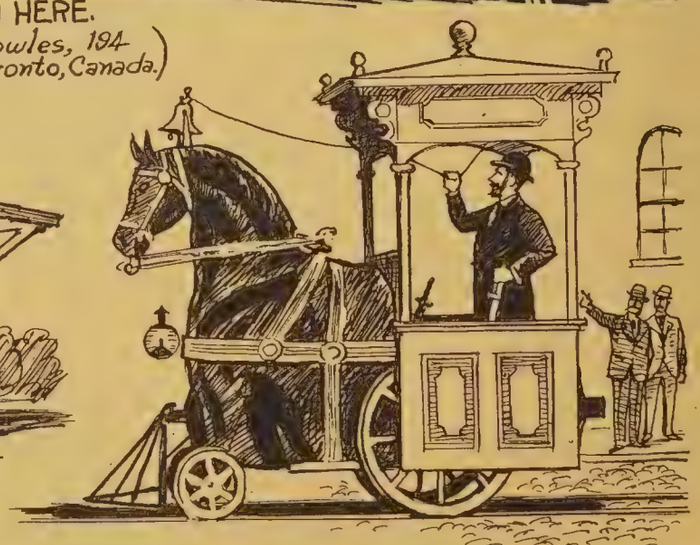
PRIVATE 500-FOOT CABLE RAILROAD AT OAKLAND, N.J., IN NEW YORK SUBURBAN AREA, CONNECTS WARNER ROSENSCHEIN'S HOME WITH HIS GARAGE, BELOW.



YAKUTAT & SOUTHERN RR. IN ALASKA HAULS ONLY FISH CATCHES BOUND FOR ICING PLANT. ENTIRE ROLLING STOCK AND MOTIVE POWER ARE SHOWN HERE. (from John Knowles, 194 Grenadier Rd., Toronto, Canada.)

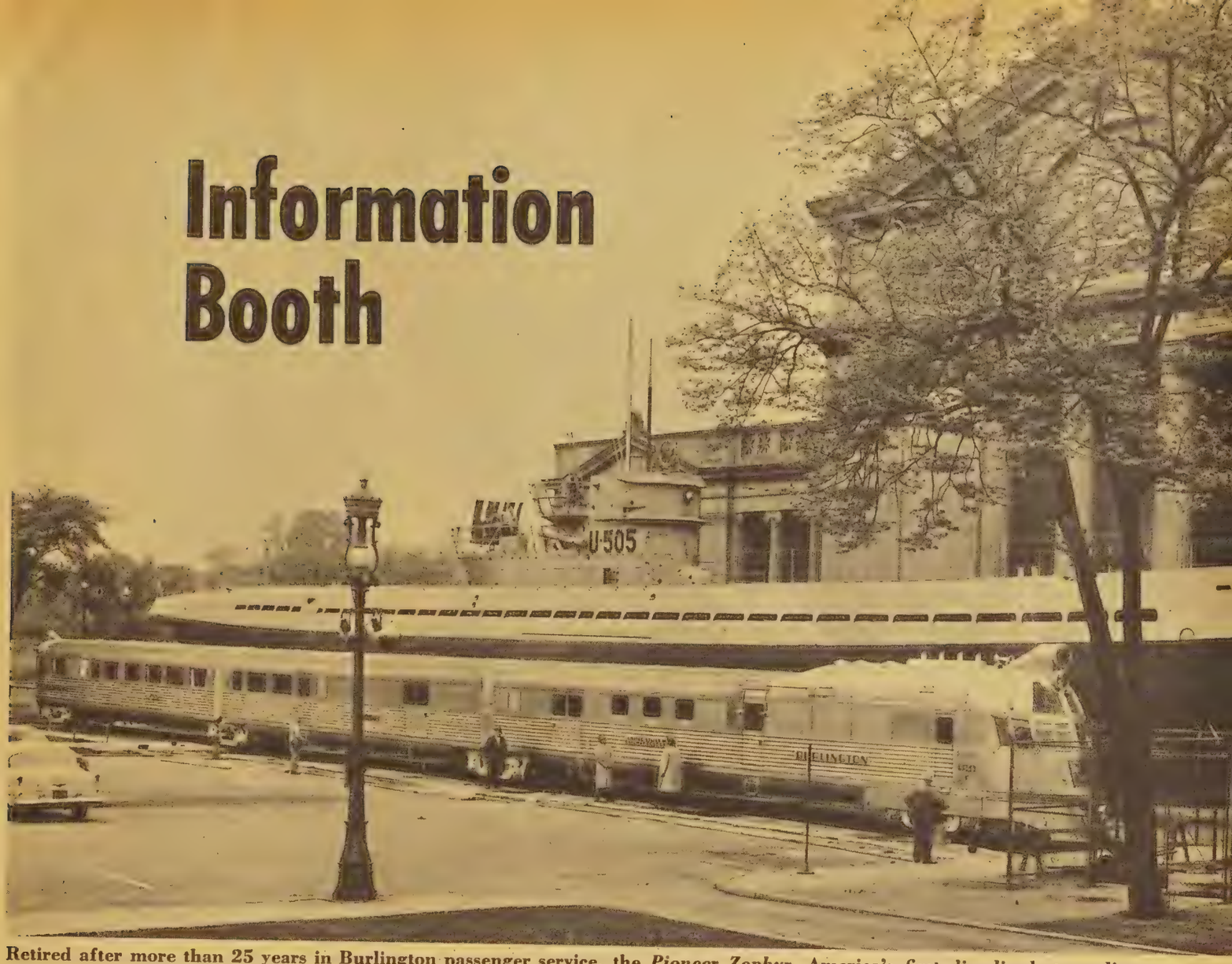


OLD SOUTHERN RY. BUILDING AT BALSAM, N.C., ONCE THE HIGHEST RAILROAD STATION IN EASTERN AMERICA, HAS BEEN SOLD TO E.J. PARSON, MOVED 300 YARDS UPHILL, AND REMODELED INTO A HOME. (from Oliver Carruth, Box 152, Waynesville, N.C.)



THIS STEAM-POWERED STREET CAR WAS DESIGNED IN 1876 BY S.R. MATHEWSON, GILROY, CALIF., BUT NEVER BUILT. THE INVENTOR SAID IT WOULD NOT FRIGHTEN HORSES. (Drawn from an old print)

Information Booth



Retired after more than 25 years in Burlington passenger service, the *Pioneer Zephyr*, America's first dieselized streamliner, is on permanent display at Chicago Museum of Science and Industry. (Just behind her is a captured German submarine.)

1, *The folksong "On Top of Old Smokie" says:*

"She will tell you more lies
Than crossties on a railroad
Or stars in the skies."

How many crossties are there on an average mile of railroad track?

About 3,000, usually spaced 21 inches apart, center to center. Before the 14-mile Woodstock Railway of Vermont was torn up in 1933, Dartmouth College sophomores would haze freshmen by forcing them to hike its entire distance from Woodstock to White River Junction and count all the railway ties en route. Sophs knew the number, 42,107, but kept it a secret.

2 *Are any relatives of the late Casey Jones working for the Illinois Central?*

Yes; his son, Charles B. Jones, Sr., pipefitter; his grandson, Charles, Jr., machinist, and a nephew, Raymond Brady, machinist. (Casey's only daughter is the wife of a GM&O official.)

3 *A history, please, of the Reading Company's Newtown branch.*

This line was operated in part by the Pennsy before the old Philadelphia & Reading took over. It dates back to April 2, 1860, being incorporated in Pennsylvania to lay tracks between Newtown and Philadelphia. Its original name, Philadelphia & Montgomery County Railroad, was changed to Philadelphia & Newtown and then Philadelphia, Newtown & New York.

The Civil War and its aftermath delayed the beginning of construction until 1872. Three years later the first four miles were opened from near 2nd Street and Erie Avenue, Philadelphia, to Cheltenham. The line was completed to Fox Chase, 5.8 miles, in time for the Philadelphia Centennial Exhibition of 1876 and it reached Newtown in '78.

At first it operated more or less independently but in conjunction with the

ASK BARBARA: Railroad questions are answered here by our research expert—as many as space permits. Top priority is given to subjects of general interest. Address Miss Barbara Kreimer, *Railroad Magazine*, 205 E. 42nd Street, New York 17, N. Y. No replies will be sent by mail.

Pennsy, using Pennsy equipment. The Pennsy hoped vainly to make it a link in a secondary route to New York.

In 1879 it was leased to P&R and has since used only Reading equipment. Its first P&R loco was No. 33, the *Chestnut Hill* (Baldwin, 1869; scrapped '81). A connecting line, built 1892, let Newtown trains use the big Reading Terminal. In 1945 the Newtown branch was formally merged into the parent company.

Since Sept. 8, 1959, it has been participating in "Operation Northeast," a municipal project that cut fares, improved service, and is getting additional riders by rail between midtown Philadelphia and northeastern suburbs.

4 *What is the electric token block system on the British Railways?*

It is one of the methods used for signaling trains over single-track lines. The object is to prevent more than one train from being in a section between two points (token stations) at the same time. The driver (engineer) of each train involved carries a token for the section he is traveling through. Usually it is fastened to an equivalent of the American train-order hoop.

Each token station contains an instrument from which the signalman gets a token to give the driver. Similar instruments at nearby stations are locked electrically, making it impossible for two tokens to be issued for any section through which a train is running.

Our information and picture come from M.C.A. Covey-Crump, a British Railways employe living at 16 Colney Heath Lane, St. Albans, Herts., England. He snapped the photo at the junction of a branch line to Higham Ferrers in Northamptonshire. It shows a guard (conductor) returning a token to a signal man. Train is running in reverse, an engine pushing the rear. *British Railways Magazine* gave this shot a distinguished award.

Many years ago the Southern Pacific used a "staff" system, very much like the British token system. Maybe some reader will tell us about it.

Mr. Covey-Crump, who recently visited Holland, reports that all Dutch railways are now fully dieselized or electrified, the only steam locos left being those in the Utrecht Railway Museum.

5 *How do you figure track grade?*

One percent grade is a rise of one foot in 100 feet; two percent grade is a rise of two feet in 100, and so on.

6 *Do American railroads have more passenger stations than freight stations?*

No. There are about 55,000 passenger stations, 57,000 freight. The latter does not include sidings, spur tracks, stock pens used for loading and unloading freight cars, or terminal or dock facilities at seaports.

7 *What was the shortest regular rail passenger run in U.S. or Canada?*

The shortest we know of was the Pennsy shuttle service in Philadelphia between the old Broad Street Station (terminal) and the modern 30th Street Station (now a terminal), 1.3 miles. Maybe some reader can beat that figure.

If you had asked which *long* passenger train made the shortest scheduled run, Bill Kessel of Hamburg, N. Y., might have the answer. He says that in 1875 a 23-car special on the Lake Shore & Michigan Southern ran from Exchange Street, Buffalo, to a station under the Ridge Road bridge at Lackawanna, N. Y., about 4 miles.

Who knows which is the shortest *present-day* rail passenger run that is regularly scheduled?

8 *If all of America's railroad freight were loaded to capacity, how much tonnage would they be carrying?*

About 112 million tons, based on the cars' total capacity and average weight of freight shipments. (Incidentally, if all those care were coupled into one train it would be nearly 14,000 miles long.)

9 *Do Sperry rail-detector cars, such as the one pictured in your August issue, page 32, test switchpoints?*

No, sir. No railroad that we know of, except the Boston & Maine, tests its switchpoints, once they are installed The B&M recently adopted a method for such tests, using the radio-active gamma ray to make X-ray pictures of every switchpoint after it is welded. X-ray shows whether or not heavy usage has developed internal flaws and

The electric token block system (item 4) reminds you of the olden days when you rode a merry-go-round and reached out to grab the brass ring.

Pre-fabricated track panels are used in the job of modernizing the New York Central's West 60th Street freight yard, Manhattan, and enlarging it to capacity of 1,300 cars.

whether or not the welding process itself left a gas pocket in the steel, a slag or sand deposit, or poor fusion.

Thus the B&M has effected a new safety precaution and it saves expense by getting longer wear with some of its much-used switchpoints.

10 *Why did the Louisville & Nashville fight the Southern for control of the little Interstate Railroad?*

The 85-mile road (which is not "interstate") serves one of the nation's richest soft-coal fields, Wise County, Va. The Southern wanted to haul that coal to the 43 utility plants on its lines. L&N wanted the Interstate as a link with the Clinchfield, which is leased jointly by L&N and the Atlantic Coast Line. The conflict ended in a compromise.

11 *I am a Wabash shopman but do odd jobs for neighbors on week-ends. Must I give them up when I apply for a railroad retirement annuity?*

No. Self-employment is permitted.

12 *An English reader asks: "What is your system of classifying curvature? I cannot reconcile your 5 degrees, etc., with the British system which expresses minimum curves as so many chains. For example, a radius of three chains equals 66 yards. Such sharp curvature is usually found in dock areas and similar installations, where locomotives of very short wheel-bases are required."*

Sy Reich puts it this way: A one-degree curve is a curve of such sharpness that two of its radii drawn from the intersection between a 100-foot chord of the curve and the curve itself form a one-degree angle at their intersection. Thus, in order to measure the sharpness of a given curve in degrees, you must take the following steps:

(1) Draw a chord 100 feet long to the circular arc of the curve.

(2) From each end of that chord draw a radius which is perpendicular to the tangent to the arc at the intersection between the chord and the arc. These two radii will intersect at a point.

(3) Measure the angle between the two radii at that point. This angle is the sharpness of the curve in degrees.

13 *Details, please, on the Pennsylvania Railroad's Horseshoe Curve.*

Horseshoe Curve, an engineering feat, was built across a valley from one ridge to another on the eastern slope of the Allegheny Mts. to connect Johnstown with Altoona, Pa. The alternative to building the curve would have meant spanning the valley with a long railroad bridge having a 4.37 percent grade—much too steep for practical operation.

Engineers threw a huge earth fill across one ravine, cut away the face of the dividing mountain, and crossed a second ravine by means of another gigantic fill. The rails reach from one ridge to the other in a great semicircle 1,300 feet across, the Horseshoe Curve. This route curves for 2,375 feet, with a 9-degree curvature and a 220-degree central angle. The east end's elevation, 1,594 feet, rises 91 feet to the mile.

The new line was opened for service Feb. 15, 1854. Originally single-tracked, it was double-tracked in 1854, and later four-tracked. Today, the *Broadway Limited* and other Pennsy streamliners round that curve on fast runs between the East and West.

Heavy freights using it generally have 2 or 3 diesel units pulling and maybe 4 or 5 pusher units at the rear. The din they make cannot compare with the thunderous exhaust of steam power that formerly echoed across the valley. A reminder of those great days is the retired Pennsy 4-6-2, No. 1361, that stands trackside, a Mecca for rail-fans. The City of Altoona maintains a rest house nearby.

14 *Why do Long Island Rail Road cars have two different numbers?*

The 4 digits under the windows are the road number. The second number (1, 2, or 3 digits), painted yellow on a red circular background between the side door and first window, denotes the order in which cars were overhauled or received from the builder. A bill-board-type sign located near Jay Tower, Jamaica, keeps passengers informed on numbers of cars received and rebuilt by the Long Island Rail Road.

GM&O train 10, shown at Bloomington, Ill., made her last run April 14, 1960.
Kenneth Schumacher, 1315 E. Fairoaks Ave., Peoria 4, Ill.

15 *What is the latest development in the field of diesel locomotives?*

General Electric has just put out a new 2500-hp. mainline diesel, the U25B, designed to move freight at high speed with lower cost than the conventional locomotives now in general use.

Guy W. Wilson of GE says: "The U25B is a completely new integrated design incorporating engineering advances which permit a 60 percent reduction in electric components. It is not just a variation of something currently in use.

"The inherent advantages of electrified rail operation are widely recognized. But for those locations where traffic density does not justify electrification we have developed self-contained, high-powered locomotives such as the gas-turbine electric, and now the U25B."

This baby was gestated for nine

How well do you know railroad operation? Can you recognize this thing at Canadian National engine terminal in Hamilton, Ont.? (See page 35)
David Plowden, New York City

Pennsy 2-10-0 pusher engines 4545 and 1284 on Horseshoe Curve in March, 1947.
Collection of Karl E. Schlachter, 112 Laurel Lane, Forest Brook Glen, Wilmington, Dela.

One of the world's great engineering triumphs: Horseshoe Curve, 5½ miles west of Altoona. Many thousands of people visit it each year, especially now that No. 1361 is enshrined there as a lasting memorial to all Pennsy steam engines.
Bud Rothaar, 757 Pierpont St., Rahway, N. J.

years. In other words, nine years of laboratory and field work preceded her coming-out party. During part of that time an experimental two-unit prototype of the U25B ran over 100,000 unit miles of actual railroad operation.

The U25B measures 62 feet, 2 inches from coupler to coupler and is built on only four axles—most diesel-electrics of comparable power have six axles—to develop 625 hp. per axle.

Prime source of power is a 4-stroke, turbo-supercharged, 16-cylinder engine built to GE specifications, having individually removable cylinders with integral heads. A 16-position throttle control provides speed adjustment and maximum control of higher horsepower performance.

Running Extra

BILL KNAPKE'S answer to question 3, June issue, evokes this comment from Dewey Glazebrook, ex-fireman, D&RGW, 1820 E. 29th St., Topeka, Kan.: "The guides move back and forth on the crosshead when the locomotive is in motion. This has been proven again and again. The crosshead does not move only when the locomotive slips. In a 170-car train climbing a mountain grade, drawbar cleavage occurs between the 85th and 86th cars. These are facts, not sandhouse arguments."

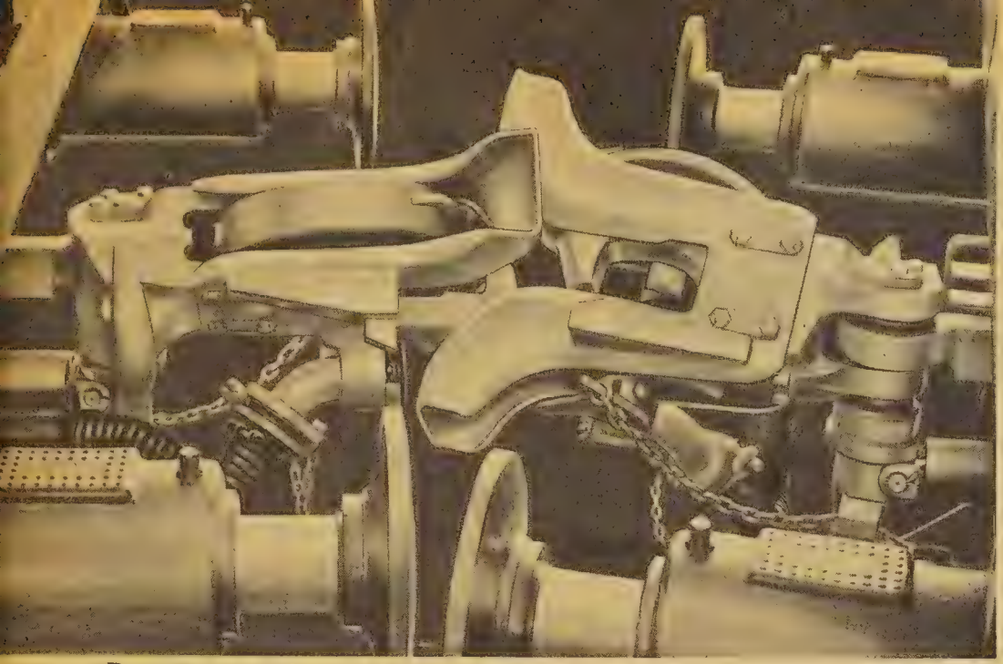
The passenger-car chandelier pictured in our June issue, page 31, is really an oil lamp, three readers tell us. Foster VanBuskirk, 27216 Cook Rd., Olmstead Falls, O., has four of them. He asks how much they are worth. Rugene Kiefer, 438 3rd St., Red Wing, Minn., has an old Pintsch gas key used on the C&NW.

"Gas for Pintsch gaslights," says Colin Lee, 119 Waverly Pl., Webster Groves, Mo., "was stored under pressure in tanks under the car. This luxury was used in Pullmans and extra-fine coaches. Ordinary day coaches had oil lamps like your picture shows."

Deri Mumford, 3410 North Ave., Zion, Ill., asks: "Which road used the first Berkshire type loco? Which road used them most, and why? What are dimensions of the biggest one ever built?"

Doug Poor, 2027 Vallecita Dr., La Puenta, Calif., wants info. on boiler design, performance, and efficiency ratings of Canadian Pacific 2-10-4 No. 8000.

"Did any road ever own a four-track Shay?" asks Peter Replinger, 927 El-



Dowty automatic coupler, a new device to couple draw-gear and brakes of freight cars, recently exhibited in New York, engages and locks even under a horizontal and vertical misalignment of curved track. Dowty Hydraulic Units Ltd., Arle Court, Cheltenham, Glos., England

Tests show the U25B (item 15) will develop 25% greater power ratings than conventional mainline diesels.

linor, Shelton, Wash. "If so, where could I get a picture of her?"

Brief histories of the Alabama, Tennessee & Northern and the Mobile & Gulf are wanted by Phil Katheimer, 2223 Riverside Drive, Mobile, Ala.

Data on the Bay Point & Clayton, in Calif., is sought by Dunstan Granshaw, 3787 Franklin Canyon Rd., Martines, Calif.

"My husband is a mental patient and needs pictures of trains or steamboats, any size, even newspaper and magazine clippings, to use in scrapbooks," writes Mrs. Leonard F. Moritz, 5313 Tallman St., Seattle 7, Wash. "Making scrapbooks is good therapy and will help him to recover. His address is Western State Hospital, P.O. Box 999, Fort Steilacoom, Wash. I want him back home. Please help me."

Wayne Bridges of Delavan, Ill., seeks pix of last meet of GM&O passenger trains 9 and 10 in Missouri on April 14, 1960, and motor car 2508 being towed back from Kansas City to Bloomington, Ill.

Now this one comes up again. When an engine is hauling a string of cars, does she pull or push them along against her couplers? Says Alex. Faubert, 3431 Webber St., Saginaw, Mich.: "We're having some hot arguments on the subject in the shop where I work."

Additions to our list of rail-picture postcards (June issue): A colored postcard showing steam train of Gold Coast RR. and Museum, located south of Miami, Fla., plus an illustrated brochure about the operating museum, will be sent to anyone for 5c plus a self-addressed stamped envelope. Address Lois Beekman, sec.-treas., Miami Railroad Historical Society, P.O. Box 8033, Coral Gables 46, Fla.

Arthur J. Normand, Edaville Concessions, Inc., Edaville Railroad, South Carver, Mass., sells 11 different colored postcard views of the slim-gage railroad and other Edaville activities at 5c each plus self-addressed stamped envelope. Edaville illustrated folder free with each order, on request.

Contradicting item 2, June issue, is this note from Stanley T. Borden, 412 Hoffman Ave., San Francisco 14, Calif.: "Sacramento Valley line was not California's first railroad. The first was Union Wharf & Plank Walk Co., incorporated Dec. 15, 1854, which ran from Union (later renamed Arcata) to and onto a wharf at Humboldt Bay. By Feb. 22, 1855, that road was giving almost hourly passenger and freight service. It used horses for motive power, but it *was* incorporated before the SV. It became the Arcata & Mad River and is still operating. Even earlier was a lumber-hauling railroad built in 1852 by Calif. Lumber Co. at Mendocino, Calif., that used oxen motive power."

Railroad calendar pix, not the calendars, are wanted by Wayne Riddle, 19 N. 31st St., Paxtang (Harrisburg), Pa.

Our reference (June, item 11) to the Lehigh Valley's *John Wilkes*, first train fully equipped with fluorescent lighting, caught the eye of Otto Kuhler, KZ Ranch, Pine, Colo., who designed the streamlining of that train in 1939 and specified the kind of illumination.

"On the inaugural run," he recalls, "I was dining with the road's president, Duncan Kerr, when the poor fellow suddenly lost his mind. He died a few weeks later." (This is one of many events detailed by Kuhler in a book to be published by Howell-North Press, 1050 Parker Street, Berkeley, Calif.)

A comment on the British practice of "slipping" coaches (June issue) comes from S. E. Webb, 11 Duke St., Howbridge, Worcester, England, Two such operations were carried on daily until June 15 of this year. The 7 a.m. Weston-Super-Mare train to Paddington slipped at Dedcot; the 5:10 p.m. Paddington-Wolverhampton run slipped at Buester.

Silhouette of engine terminal, page 33, shows the structure supporting the crane which moved steam-locomotive ashes from the ashpit to the car into which they were dumped for removal.

A builder's plate was removed from a Porter 0-4-OT, Koppers Co. No. 2. at Nashua, N.H., before the engine was purchased by Ed Clark of Clark's Trading Post, Box 1, North Woodstock, N. H. If the fan who has this number plate will let Ed borrow it for use during the summer, Ed will, in turn, let the fan operate whichever loco is under steam any day he visits North Woodstock during the season. He realizes that the fan who removed the plate probably didn't know the engine would be saved, so he has no hard feelings about it.

A sight you'll never see again: Johnstown (Pa.) Traction Company car No. 350 has just passed under Pennsy bridge. Trolley line was abandoned June 11.
Stephen D. Maguire, 1411 River Road, Belmar, N.J.

A "big squeeze" test was conducted at the Budd Co. testing laboratories on the first of 270 new cars for the Market-Frankford subway-el of Philadelphia Transportation Company. The 200,000-pound end-to-end test was made to measure the strength of the car and its ability to withstand severe pressure in service.

Stephen D. Maguire

Car 76 of the Philadelphia Suburban Transportation stops at Ardmore station.

Steve Maguire's
TRANSIT TOPICS

ADMITTING defeat in their latest plan to replace trolleys with buses, Philadelphia Suburban Transportation Co. has forfeited a $250,000 option to buy the old 69th Street Terminal for use as an all-bus depot and multi-million-dollar office building.

Steve Maguire

PST trolleys and buses are still using the terminal loop, paying rent to the Philadelphia Transportation Co., which is now $250,000 richer for the deal. The terminal project was jettisoned after the State Legislature had turned down a bill that would have let PST abandon all track on private right-of-way, substitute buses, and get title to the land without condemnation proceedings. Andrew Maginnis of Philadelphia says PST could not sign up enough tenants to justify the huge office-building project.

Thus an uncertain future looms for suburban routes out of 69th Street to Ardmore, Media, and Sharon Hill. And with the Johnstown, Pa., trolley cars gone, PST is now the sole traction line in the East still operating non-PCC cars of city and also interurban style.

Johnstown Traction Co. had the only small-city trolley-car operation left in America, but that ended on Saturday, June 11, and trolley buses took over.

Johnstown rail transit began when six horsecars started plodding over lines of the Johnstown Passenger Railway, incorporated May 2, 1882. Seven years later a big flood wiped out most of the city, including its streetcar system. With the rebuilding, new electric cars replaced horsecars and started operating Nov. 8, 1890.

Despite a carbarn fire and another flood, the electric cars continued rolling until the final curtain. City trolleys quit officially 6 u.m., June 11, but later that night a few railfan specials competed with one another for the honor of running last.

Meanwhile, sale of PTC to the City

of Philadelphia now seems more likely than it did a year ago, according to Mr. Maginnis. Last year PTC and the City were $30 million apart in offers; today they are within $5 million of each other.

PLANS to provide rapid transit for New Jersey are falling on deaf ears in the state's Legislature. As proposed originally by N. J. Highway Commissioner Palmer, there would be an 11-mile transit line from Camden east to Kirkwood, utilizing existing rail trackage. In North Jersey, the Hudson & Manhattan RR. would be placed under bi-state control and additional passengers would be fed to it at Newark by running Jersey Central trains into Penn Station at Newark.

THE FIRST regular newspaper column featuring the activities of a trolley museum is now appearing weekly in the *Perris Progress* of Perris, Calif. Entitled *Orange Empire Trolley Topics*, it is written by Don Shelburne, Temple City, California.

From Don's columns we learn that old cars stored on a Santa Fe spur were moved to the Perris location over track recently obtained from the San Diego & Arizona Eastern Ry. had been laid to make the connection. Also, Museum members are seeking brass parts that were stripped from several cars not long ago. Anyone knowing where these may have been disposed of should tell Jim Walker at the Museum.

The first Irish tram to land in America is due to arrive at the Perris museum shortly. It comes from the Hill of Howth line, near Dublin (abandoned).

Refuting stories of the condition of the cars at the Perris Museum, James W. Walker, Jr., secretary of Orange Empire Trolley Museum, attributes Jerome Weirich's reports to the fact that he failed to go to the main property where 35 cars were kept securely, about a mile away from the museum site.

EIGHT different trolley postcards in color, 35c, or 5c each, plus stamped addressed envelope. Branford Electric Ry. Assoc., Box 457, Short Beach, Conn.

TO PARAPHRASE an old saying, if survey plans were horses, Los Angeles citizens would ride. But they are not likely to ride electric vehicles, despite the hopes of those who want to see rapid transit in the "City of the Angels." The latest futile survey recommends a sausage-shaped loop connecting Holly-

Factory Worker Now Full-Time Writer

"I now have 650 sales to my credit," writes Kelvin Wallace Coventry of Derby, N. Y. "Since I've been writing, I've also covered about 200,000 miles in running down stories—good way to see the country. I'm hitting plenty of national magazines, and assignments really keep me hopping. I've been full-time free-lancing five years now. All of which was just a dream when I was plugging along in a dead-end factory job."

Adventure Magazines Need New Writers

Yes, adventure magazines like other magazines across the country, need stories and articles.

Would you be willing to spend a few hours a week learning to write so you may earn $500 to $1500 a year extra income? Or many thousands on a full-time basis? We have helped many a clerk, soldier, housewife, mechanic or teacher to write for money. Why not you?

Learn From Successful Writers

Palmer Institute's unique method of training makes it easier than you may imagine to learn—for not just *one* field of writing, but for *all*: Stories, Articles, TV Scripts—*all at one low cost.* It is endorsed by famous authors and hundreds of successful graduates and its accreditation by *The National Home Study Council is assurance of reliability and integrity.* You receive interesting, understandable instruction and *individual* coaching by professionals who go over your writing, giving helpful, detailed instructions showing how to write salable material.

Sells One Story to *Post*, CBS, NBC-TV

"The Outer Limit" story sold first to *Post*, next to CBS radio, then to NBC-TV Its author writes: "After starting with Palmer I really learned what a short story is. My writing has improved; it's easier, too." *J. Graham Doar, Gearhart, Ore.*

Student Earns While Learning

"I started taking your course about six months ago, and during recent months I've sold six stories to leading science-fiction magazines."—*Charles E. Fritch, Utica, N.Y.*

Sales Have Totaled $2,645

"Since beginning the Palmer course, my sales have totaled $2,645. The course has been most helpful in everything I've been able to do. I would like to commend my fine, sympathetic instructor."—*William J. Clancy, Prescott, Ariz.*

Sells to *Coronet*, *Reader's Digest*

"What can Palmer training give me? I asked myself six months ago. Answer: Now I've sold to *Coronet, Reader's Digest,* and others."—*Mrs. Catherine Benion, Milton, Pa.*

FREE Offer Shows How

So you can see for yourself how you may cash in on the opportunities for new writers, we will send you free (1) a sample lesson. (2) an actual writing assignment, with (3) typical answers showing how professional writers do the work, and (4) a 40-page book. "The Art of Writing Salable Stories" describing your opportunities and giving details of our professional instruction.

Frankly, we make this offer because we are confident that when you see how interesting and helpful our training is you will want to get started earning extra money or enjoying the independence and freedom of a full-time writing career. No obligation; no salesman will call. Send now before you forget.

Mail Coupon or Postcard Today

Palmer Institute of Authorship
SINCE 1917
Accredited: National Home Study Council
Approved for Veterans
1680 N. SYCAMORE
DESK ADV-90
HOLLYWOOD 28, CALIFORNIA

FREE Palmer Institute of Authorship
1680 N. Sycamore, Desk ADV-90
Hollywood 28, California

Please mail me free sample lesson package and 40-page book explaining how you help new writers get started and established writers increase their income. No obligation. No salesman will call.

Mr.
Mrs.
Miss

Address.....

City.....Zone....State.....

Please Print Clearly Veterans Check Here ☐

Feb. '57: Last night of operation on Chicago's Broadway-State trolley line. At right, Dearborn Station as GTW began dieselizing its entire rail system.
Ted Malott, 616 Wrightwood Ave., Chicago

wood Harbor and Santa Monica with the proposed Industrial Freeway as they converge into the downtown area. Secondary distributor facilities also would have to be located in the downtown area. Lots of plans—no action!

TRAIN 417-418, the last one-car multiple-unit south of Baltimore, Md., made its final run on April 29th, with Herman H. Diers of 4722 Chesapeake St., N.W., Washington 16, D. C., as the only railfan present. Operating between Baltimore and Washington, the trip was uneventful. No newspaperman was on board and no attention was paid to the farewell run except for Mr. Diers' buying the crew coffee on a short layover at Washington Union Station.

DULUTH fire trolley car (pictured in our June issue) ran only in the section of Duluth known as Park Point, we learn from C. E. England, 437 Corporation St., Beaver, Pa. Park Point, a narrow neck of land jutting out into Lake Superior, was reached only by a causeway and the trolley line. At times the causeway would become flooded, blocking highway traffic. For such an eventuality, should a fire occur at the same time, the fire trolley was built.

TWO beautifully colored postcards have just been issued by Pittsburgh Electric Ry. Club, P. O. Box 832, Pittsburgh 30, Pa., to raise funds for its Arden Trolley Musuem near Washington, Pa. Picturing West Penn 832 and a Pittsburgh Rys. car, they sell at 10 cents each or two for 15 cents.

OLD Cleveland Rys. car 1217 is now working as a line car on the Cleveland Transit System, according to Ted Taetsch, Lakewood, O. For a while this car was operated as No. 17 on Shaker Heights Rapid Transit, which sold it back to the Cleveland system for the modest price of $250.

Destination roll-sign of ex-Pacific Electric PCC car, series 5000, and its owner, Arnold Irvine Reid, who is a railfan living at Defensa 665, Buenos Aires (R. 46), in Argentina, South America.

BROOKLYN once had a cable-car line, writes Joseph T. Heymann, Merrick, N. Y., adding to a listing of such routes in our April issue.

"Although very short, only 600 feet long, it was installed on the Montague Street horsecar line in downtown Brooklyn around 1889. The entire route was about two miles long but the last 600 feet to the waterfront ran down a steep grade on what is now Furman Street. Horses had trouble on this grade, so an inclined cable line was installed. In 1894-'6 the Brooklyn horsecar routes were electrified, including the whole Montague Street line, and the cable operation was discontinued.

"But the old track and cable conduit remained until the line was abandoned to buses in about 1930. I learned this from my father, now 85, who worked for Brooklyn Rapid Transit from 1895 until 1920 and lived within a mile of this line."

THE FORMER St. Louis & Belleville Electric RR., a ten-mile freight line from East St. Louis to Freeburg, Ill., now dieselized, has just been sold by Peabody Coal Co. to the Illinois Central Railroad. More and more the big roads are taking over the small ones.

RELOCATION of 2½ miles of ground-level track to adjacent C&NW overhead right-of-way in Oak Park, Ill., was begun by Chicago Transit Authority last spring. Scheduled for completion in August, 1961, it will abolish a tortuous portion of CTA elevated service alongside the roadway, operated with overhead trolleys and involving 22 grade crossings.

AN ILLUSTRATED history of the Petaluma & Santa Rosa Electric RR. by Stanley T. Borden was contained in last April's issue of *The Western Railroader*, a monthly publication devoted to steam, electric, and diesel lines on the West coast. That issue can be bought for 50c from Francis Guido, P. O. Box 668, San Mateo, Calif. Subscriptions to *Western Railroader* costs $1 for 10 issues.

TWO former Sacramento streetcar bodies, Nos. 38 and 39, have been bought by B. Byrum, 1511 26th St., Sacramento, Calif. These cars will be restored to open and closed types if Mr. Byrum can get parts for them. He asks where he can obtain Brill 27G trucks, Westinghouse K10 controllers, Johnston fare boxes, pole bases, and trolley poles. Does any reader know the answer?

EXPERIMENTS are in progress to determine what happens to the tieless, spikeless track which was installed early this year on the Times Square shuttle line of the New York subway system. The shuttle is a guinea pig for many subway experiments. It is scheduled to be the first line to receive crewless trains, a project on which Sy Reich is employed professionally. Its short, direct route between Times Square and Grand Central terminal in midtown New York City make it the obvious choice for experiments.

This latest test involves a 160-foot strip of concrete, rubber, and rail at the end of one track at Grand Central

Expressway without a traffic jam

It's 218,000 miles long and it didn't cost you a cent in taxes. With only *two* sets of track, a *railroad* expressway can handle the traffic of *twenty* four-lane highways built with public funds.

Truck trailers in ever-increasing numbers are deserting crowded highways for this steel expressway. More and more, standardized vans and containers interchangeable with other forms of transport are riding the rails "piggyback"...bringing you the things you need, the things you buy.

Piggyback is a spectacularly successful example of the forward thinking on the railroads today. This is railroad progress that benefits everyone — for we'll need railroads more than ever in the boom years ahead.

That's why an enlightened public policy, giving railroads equal opportunity with competing forms of transportation, is in everyone's interest. America's railroads — the lifeline of the nation — are the main line to *your* future.

ASSOCIATION OF

AMERICAN RAILROADS

WASHINGTON 6, D. C.

Terminal. If it produces a smooth ride, with lessening of erosion and moisture from the elements of the underground stations, the rest of the 723-mile subway system may receive the same treatment on underground trackage.

The experimental track, with rails set in pieces of concrete, bolted down on rubber beds, was already in use on the Toronto Transit subway system a few years ago. Will some Canadian fan tell us the results of the Toronto experiment?

ADDITIONS to Homer G. Benton's list of museum trolley cars in our March issue are still coming in. For example:

Pittsburgh Electric Ry. Club at Arden, Pa., has the following: West Penn Rys. loco No. 1, built by WP in 1916; Johnstown Traction Co. car 350, built by St. Louis in 1926, and Pennsy 4-wheel caboose 476199.

San Diego Electric car 1043 is being restored by local railfans, says Thomas H. Irion, Sacramento, Calif. On removing paint they revealed the builder's lettering, J. G. Brill.

Bay Area Electric RR. Assn. cars are located as follows: Oakland has Key 271, 1001, 1011, 1201, 1215 and 1218, also SN 1005 and Saskatoon 12. Yuba City has SN 62 and Muni. 178. Richmond has Key 186 and SL&U 751, while Market Street 974 is at Linden, Calif.

According to Gary G. Allen, 317 Griswold St., Glendale, Calif., former Pacific Electric interurban 538, which had been stored at Warner Bros. studio as a movie prop since 1936, is now at the Perris, Calif., Museum. Gary bought the car last year from Warner Bros. He wants to know about any movies in which she appeared. WB had lettered one side *Inter City Railway*, so she must have been in a film.

Donald A. Hansen, 3904 19th St., San Francisco 14, Calif.

April 13, 1958: Underhills terminal of Key System's B line, Oakland, California.

New Books

STREET CARS AND INTERURBANS OF YESTERDAY, a collection of illustrations and drawings, 166 pages, hard covers, 8½x11", published by the compiler, Owen Davies, 1214 N. La Salle St., Chicago 10, Ill., $8.50.

Mr. Davies, bookseller specializing in railroadiana, was aware that the *Electric Railway Dictionary*, published by McGraw-Hill in 1911, contained a wealth of material inaccessible to present-day fans. He knew that the old volume was rare, for even as a bookseller he had seen only three copies of it in 30 years! So he had it reproduced *in toto*.

This is neither a book to read nor a collection of scenic photos. Originally published as a complete guide for trolley-car builders, its 775 illustrations include builders' views of various types of equipment, dimension drawings, pictures of trucks, motors, headlights, bells, and so on. For current builders of model cars and operators of trolley museums it is truly valuable.

THE ELECTRIC INTERURBAN RYS. IN AMERICA, by Profs. Geo. W. Hilton and John F. Due, 463 pages, hard covers, 16 pages of pix, 6x9", indexed, Stanford University Press, Stanford, Calif., $9.50.

This scholarly work covers two generations of interurbans plus a few earlier lines and a couple others still hanging on today. Aside from one chapter in an earlier book, *Trolley Car Treasury* (McGraw-Hill Books, 330 W. 42nd St., New York), Hilton and Due are the only authors we know of who ever tried to document completely the story of electric lines that at one time seriously competed with steam roads.

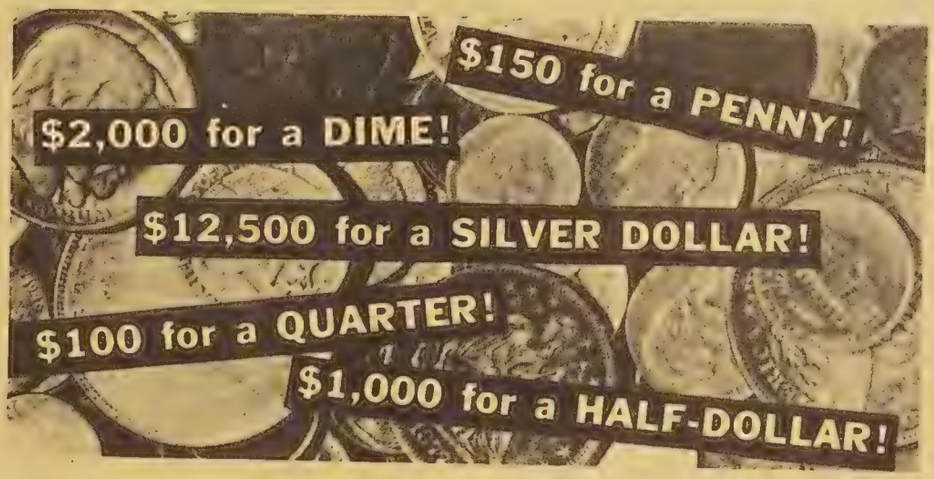
Hilton and Due devote 250 pages to a history of the interurban industry, including detailed studies of passenger and freight traffic, etc. The other pages cover the interurbans in each state—valuable source material but overwritten. The authors ask that corrections, if any, be sent to *ERA Headlights*, 145 Greenwich St., New York 6, N. Y.

The new book supplements *Trolley Car Treasury*, published in 1956. We wish it were as copiously illustrated as the earlier work and we wish its style were as lively as that of Frank Rowsome (managing editor, *Popular Science Monthly*), who wrote *TCT*. Even so, avid fans will find it interesting. Those aiming to be well informed on electric transportation will have both books in their libraries. ●

How You Can Find A Fortune In Old Coins!

Many Common U. S. Coins Are Worth Far More Than Face Value!

Read how nickels, dimes, and quarters—the very change in your pocket right now, could make you rich. This is no fairy tale! You, too, may be letting a fortune slip through your fingers without realizing it!



Here is HOW to SPOT the coins that are worth thousands of dollars

NEXT time you jingle the change in your pocket, think twice. You could be touching the coin that will bring you a fortune in the fabulous "old money" market!

Last year alone, at auctions and dealers, millions of dollars were paid for old coins that someone, not necessarily a coin expert, had sense enough to spot. A lady shopping at the corner store noticed an odd looking quarter in her change. A youth rummaging in the attic, came across a funny looking silver dollar in an old trunk. A father saving pennies in a jar for his youngster found a rarity. It could happen to you . . . if you know what to look for!

Special Note to those who handle a good deal of money

If you are a bank teller, cashier, storekeeper, ticket-seller, etc., you handle many coins daily. A percentage of them probably have Extra Value! Learn what coins are valuable! Learn to spot and recognize them. You may find and earn extra dollars—possibly a fortune—if you keep your eyes open!

Are you OVERLOOKING coins that could make you rich?

Valuable coins are all around us. Could you recognize a coin for what it is worth? Now, a new book tells all you need to know about every U. S. coin ever minted. "Fell's Official United States Coin Book" is one of the most complete guides of its type ever published.

It describes in detail the entire lucrative business of collecting, classifying and selling coins for a profit. 17 fact-packed chapters give the value of all U. S. coins from the earliest Colonial times to present. Describes how to start a collection; how to invest and speculate in coins; how to spot the coins that mean BIG money. Numismatics, the science of coins, is an educational hobby that interests and delights young and old. This book will give you a thorough understanding of every angle of coin collecting, coin buying and selling, coin values, coin know-how.

10 Days FREE Examination! Mail Coupon NOW!

Mail coupon at once and we'll rush this amazing book at our expense. Read it, use it to check your coins FREE for 10 days. Then if not absolutely convinced it will help you to find a fortune in coins, return for refund. Rush coupon NOW. Arden Book Co., Dept. CK8 386 Fourth Ave., New York 16, N. Y.

DO YOU HAVE THESE COINS?

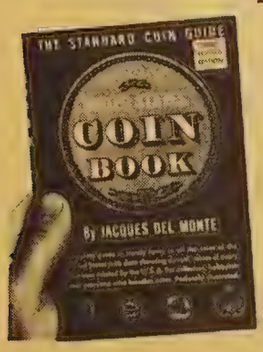
You would be astonished as to their worth! See page 105 of "Fell's Official United States Coin Book" for important information.

LARGE CENTS, 1793 to 1799, 1804, 1809, 1857
INDIAN PENNIES, 1878, 1908S, 1909S
TWO CENT PIECES, 1872
FLYING EAGLE CENTS, 1856
NICKEL THREECENT PIECES, 1877, 1878, 1887
LIBERTY HEAD NICKELS, 1886
MERCURY DIMES, 1916D
MORGAN QUARTERS, 1897S, 1901S, 1913S
LIBERTY STANDING QUARTERS, 1916, 1919, 1924
WASHINGTON QUARTERS, 1932D, 1936D

HOW TO MAKE 5000% PROFIT or more on a risk-proof foolproof investment backed by the U. S. Gov't.

Sound fantastic? Now anyone with foresight can invest in coins profitably and wisely. "Fell's Official U. S. Coin Book" gives complete plan on how YOU can use time to work for your investment!

Fell's Official United States Coin Book ***TELLS YOU—***



- What makes a coin valuable
- How to look for valuable coins
- How to sell coins to dealers
- How to start a coin collection that will make your children rich
- Exact value of every U. S. (and possessions) coin ever minted.
- How to speculate in coins for sure profit
- Coin laws and regulations
- Technical coin terminology, including mint marks, planchets, overdates, etc.
- How to avoid saving worthless coins

—Also lists the most popular coins; charts, coins and values. Thousands of facts on making money with coins—all in one easy-to-read volume.

ARDEN BOOK CO., Dept. CK8
386 Fourth Ave., New York 16, N. Y.

I want to be able to spot valuable coins and to have fun with this interesting hobby. Rush "Fell's Official United States Coin Book".

☐ I enclose $1.98, send prepaid. I save postage.

☐ Send C.O.D. I'll pay postman $1.98 plus C.O.D. and postage charges.

Either way, I can return book within 10 days for refund, unless completely satisfied.

Name .....

Address .....

City..... State.....

C.O.D. in U. S. only. Foreign send $1.98 in U. S. funds, or payable in U. S.

The author as he looked 40 years ago.

I Wish I Knew the Answer

by HOWARD R. WYBERG

FAMILIARITY with the Bible account of Joseph and Potiphar's wife may help you to understand what happened to me at a boxcar station in the hot Arizona desert forty years ago. On the other hand, it may not. Reading one of Harry Bedwell's desert stories in *Railroad Magazine* recalled that day. Now that I am retired from a long career of boomer railroading, mostly telegraph service, I have plenty of time to read.

Let's go back to 1920. That's the year I went to Arizona to assist a station agent in expediting the movement of rolling stock accumulated there. After boarding a Southern Pacific passenger train in Los Angeles, I spent an uncomfortable night in the smoker, curled up on an improvised berth consisting of my suitcase placed between two seats.

At daybreak the conductor shook me awake, said we were coming to my stop, and soon I unloaded. Some freight cars stood on a short siding beside a couple of heat-warped boxcar buildings. That's all I could see except the railroad track, a line of black telegraph poles marching across the sand dunes, and a few Joshua trees under a pink sky.

It was too early to wake up the agent, so I spent my time looking around. Presently a convoy of mule-drawn wagons came across the horizon and in time I heard creaking axles, cursing drivers, and the ugly crack of blacksnake whips. I remember feeling sorry for the mules.

That commotion aroused the SP agent. He barely glanced at my credentials, handed me a sheaf of freight bills, and said: "Your job is to check freight to the wagons and be damn sure I get receipts for everything they haul away."

Somehow I didn't like the fellow. His voice sounded nasty. The teamsters were backing up to the railroad cars, yelling for service, while the tantalyzing smell of bacon frying whetted my appetite. I was famished, but before I could eat the sourpuss agent made me work.

"What's the big hurry?" I asked.

"Those wagons must be loaded and on their way before the heat sets in," he said. "Our thermometer hits 120 around eleven a.m."

This activity was occasioned by the opening of a new settlement at Blythe Valley, some distance away. Until the Santa Fe could build a rail line to that point, goods had to be freighted by mule teams across the sandy wasteland from the little SP depot where I was employed temporarily.

In time I got the wagons on their way, and reported to the kitchen. Man, was I hungry? I couldn't wait to sink my teeth into bacon and eggs. But the agent said the extra help supplied their own food and did their batching in the boxcar assigned for that purpose. The sight of a wicked-looking Colt six-shooter in a holster hanging in the kitchen did not appease my wrath.

"If that's your setup," I retorted, "I'm going back on the next train."

Just then the agent's wife appeared—and what a contrast! Her disposition was as gentle as the agent's was mean. Young and pretty, too. Blue eyes, honey-colored hair. Curves in the right places.

"You can't refuse a man a meal in this desert," she said, and turned to me. "Mr. Wyberg, you will find water over there," pointing, "and while you're washing up I'll make your breakfast."

"Thank you, ma'm," I said, regretting she was stuck with such a mate. In the days that followed—long, scorching days—her husband never once showed me friendliness. I was glad to see the job end. When the freight shipments became a mere trickle, he said, "Wyberg, I won't need you any more after today." Then he went away somewhere, leaving his wife in charge for a while.

Potatoes and other stuff, falling out of broken containers, had littered one of the cars in which I worked. I told the lady about them because it didn't seem right to waste good food. Then I returned to the car to finish up.

Well, sir, I had the surprise of a lifetime. While I was juggling freight I heard a sigh and looked around. The lady had clambered into the semi-dark car, toting an empty dishpan, and she asked softly, "Where are those spuds you spoke about?"

I will always remember that vision in the doorway with the glaring Arizona sun as a backdrop. You couldn't blame her for wearing so little attire that day—apparently nothing at all but a thin, cotton, print dress and a pair of sandals—because, as I said, the weather was real hot, 120 in the shade. Silhouetted by the bright light, she seemed to be totally nude. A work of art.

The sight flabbergasted me. I had heaped the potatoes into a pile and shoved them against the wall so they wouldn't get stepped on. Without a word I pointed shakily in that direction, but the visitor made no move to gather them. Instead, she stood quietly in the doorway, smiling a little like the dame in the Mona Lisa painting and with every line and curve of her beautiful body showing in bold relief.

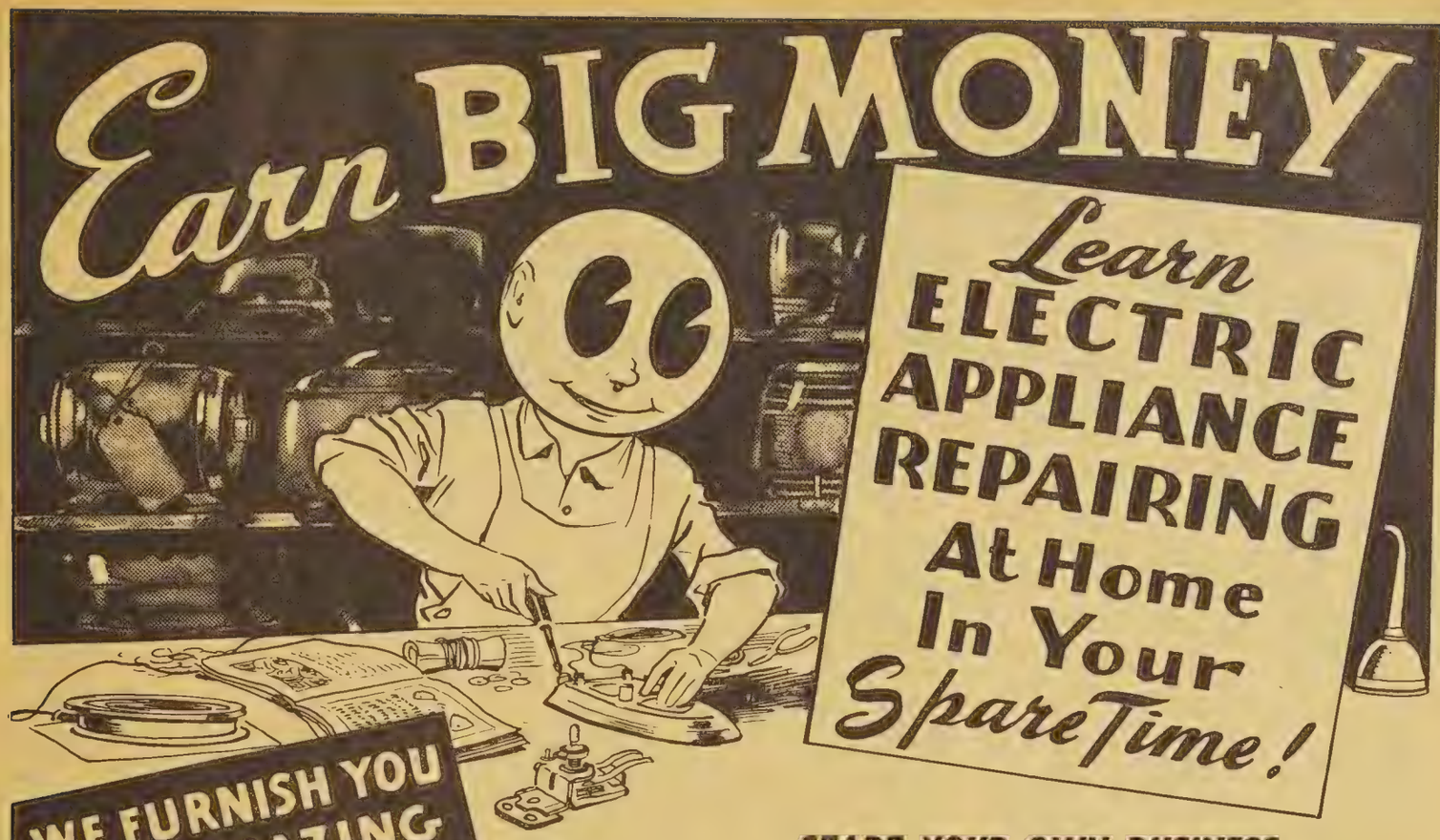
What *she* was thinking I will never be sure, but I did know my own mind. Being young and healthy, in a situation comparable to the legendary temptation of St. Anthony, I had to do something mighty quick before trouble broke loose. So I walked toward the agent's wife and said in a voice I did not recognize as my own: "Get the hell out of here! *I'll* bring the potatoes."

The blue-eyed lady silently handed me the dishpan, jumped down from the car, and went away. I never saw her again. That afternoon, still in a mental turmoil, I boarded a westbound train without a good-bye from anyone.

Some time afterward I told a fellow rail the story. "You were lucky," he said, "not to have stopped a bullet between the eyes. Reminds me of a boomer brakeman I know who used to work the Yuma freight run. One day, on a sudden impulse, he gave a Mexican gal a friendly pat below the belt—and had to leave town ahead of his train. The only thing that saved his life was the fact that her old man had a knife instead of a gun."

Yes, I was lucky. My experience in the Arizona desert in 1920 was only a brief episode in fifty years of railroading. But one question has haunted me ever since. Did the agent's wife deliberately outline her almost naked body against the sharp sunlight or was she unaware of the startling effect she created? I wish I knew the answer. ●

Earn BIG MONEY



Learn ELECTRIC APPLIANCE REPAIRING At Home In Your Spare Time!

START YOUR OWN BUSINESS

There are millions of electrical equipment units in daily use in factories, homes, office buildings and on farms. Skilled electrical technicians are needed to keep this equipment in good running condition. Learn at home in your spare time.

$5.00-$6.00 PER HOUR

is often charged for making ordinary repairs. We show you how to repair refrigerators, vacuum cleaners, washing machines, motors, factory equipment, electrical farm equipment, do house wiring, etc.

BEGIN IN YOUR OWN KITCHEN, BASEMENT OR GARAGE. You don't need elaborate fixtures or expensive equipment to be a successful repairman. Work as many hours as you wish. The Electrical Appliance Technician is his own boss!

IF YOU ARE MECHANICALLY INCLINED, can hold and use tools, we will give you the training and time saving kits—a multi-purpose CHRISTY ELECTRONIC KIT whose dials show you exactly where the trouble lies with electrical equipment that does not work properly—a CERAMIC HEATER KIT that enables you to wire your own heating elements and pocket all of the profits for yourself—LESSON MANUALS written in simple, easy-to-understand language profusely illustrated showing step-by-step repair shortcuts—all of which give you the Know-how for making more money and how to get financial security.

YOU ALSO LEARN how to build power tools from spare parts, how to solicit business and keep business coming in, what to charge your customers, etc. Thousands of CHRISTY graduates in all parts of the world prove the value of CTS Training. WRITE FOR SPECIAL PAY LATER FORM.

CHRISTY TRADES SCHOOL, 3214-16 W. Lawrence, Dept. A-252, Chicago 25

WE FURNISH YOU THIS AMAZING ELECTRONIC KIT

WE GIVE YOU ALSO THE CERAMIC HEATER KIT

"All CTS graduates are entitled to CTS lifetime advisory service."

R. S. Frazer, President

SEND FOR OUR NEW 32 PAGE CATALOGUE!

MAIL THIS COUPON TODAY!

CHRISTY TRADES SCHOOL, Dept. A-252,
3214-16 W. Lawrence, Chicago 25, Ill.

Gentlemen:

Please rush me your FREE ILLUSTRATED BOOK about Electrical Appliance Servicing, facts on your Electronic Kit and Special form for paying later from earnings while learning.

Name _____ Age _____

Address _____

City _____ Zone _____ State _____

A RAILROAD classic, copyright 1933 by Popular Publications, Inc.

EMERGENCY RUN

Charlie Braddock Was a Throttle Artist but He Had One Fault: He Took Some Long Chances in Getting the Mail Over the Division on Time

by JOHN JOHNS

The author began his railroad career as a Pennsy fireman, later went into New York Central train service, and was a conductor when death cut him off the board in 1945.

THE FAST MAIL whistled for a crossing. Silent houses, a park, and shadowy trees leaped for an instant into the range of its bright headlight. Whistle screaming, the train burned up the rails through the darkened town. A reddish-yellow glare from the open firebox of the trim Atlantic-type engine, No. 7003, momentarily dimmed the stars. The town fled backward in the darkness.

Big Charlie Braddock was running the mail. Releasing the whistle rope, he glanced at his watch. Eleven o'clock. To make up lost time they had averaged eighty-five miles an hour since leaving Wilmington. He waited until his fireman, Art Randall, had slammed the firebox door and then he spoke above the din of pounding wheels.

"We'll reach Baltimore on the dot, with no more time to make up from there to Washington."

Art shrugged his broad shoulders. "The speed limit is seventy."

"Seventy, hell! Kennicott don't know what century we're living in."

Kennicott was the super and the year was 1905. The ashcat swung open the firebox door. "He's the toughest guy on this division."

"So what? We got to be on time."

Art tossed a shovelful of coal into the yawning furnace. "Even if it costs your job?"

"Horsefeathers!" The engineer leaned out the cab window and peered ahead to catch the signal lights. Uneasy thoughts of Superintendent Kennicott faded from his mind.

Mr. J. C. Kennicott was a typical Pennsy official, a Book of Rules man. Sandhouse gossip had it that he was waiting like a cat at a mousehole for Braddock to slip too far, just once, for the Brotherhood of Locomotive Engineers to save him. The division superintendent did not like ballast scorchers. He'd been heard to say at a lunch counter in Broad Street Station, Philadelphia, that Braddock was running too fast for his own good.

But schedules had to be met, regardless, and to Art's relief the Mail pulled out of the old Baltimore depot on time.

"Now," exulted Charlie, "we can take it easy from here on in."

"We'd better," Art croaked.

Blue-eyed and round-faced, with an erect bearing and a belly as flat as an Indian's, big Charlie Braddock had a fine figure at thirty-five but was still a bachelor. He felt awkward in the presence of women. For one thing, he had no sister nor even a female cousin. And he'd never known what it was like to have a girl friend—except for a brief episode with Anne McPherson, back in high-school days. Anne was a slatternly dyed blonde. She wore dresses with very low necklines to show her fat breasts and she told dirty jokes that made him feel ashamed. Charlie ditched her without regret.

And so the years had crept up without his meeting the right woman. Almost all of the men who worked with him were married. Even Art Randall, who was scarcely more than a kid. One fine spring afternoon in the crew room at the Jersey City waterfront terminal Art looked up from a newspaper.

"It says here," he remarked, "that the females of America outnumber the males by a hundred and six to a hundred, and they live longer, too."

A hostler picked it up. "That's good news for Braddock if he ain't already in love with the 7003." A chuckle. "How about it, Charlie?"

"I'm not the marrying kind," the engineer said defensively, looking at the Seth-Thomas clock on the wall. "Time to go, Art. What do you say?"

He rose and walked briskly to the door, with the fireman at his heels.

CHARLIE recalled that conversation two days later, on the New York Express, his regular northbound run. As they passed through Strawberry Hollow, not far from Washington, he spied a slim woman's figure, dressed in white, standing in the open doorway of a little wooden schoolhouse, waving at the train. Sunlight bathed her pretty face.

She appeared to be young, but Charlie couldn't be sure. He guessed she was the village school teacher. Leaning impulsively out the cab window, he returned the greeting, and as the express rushed by he looked back. She was still waving.

Charlie grinned. "Can you beat that?"

"Not bad at all," Art nodded. "Don't tell me you're interested in a dame."

The engineer did not reply. But on the next northbound trip he watched for the teacher. Yes, she was there, waving a handkerchief. And as the days went by he saw her again and again, sometimes framed in the doorway, sometimes seated demurely on a grassy hillock midway between the school and the right-of-way fence, with her long white dress pulled down to the top of her ankles. *Modest,* Charlie thought. *Not like Anne McPherson.*

Then he varied the pattern. Before leaving Washington, he bought two

newspapers and tied them together in a roll, and at Strawberry Hollow he tossed them off toward the school. The package landed on the hillock beside a clump of violets. The mysterious stranger picked it up, signaled thanks. *This,* Charlie reflected, *is exciting.*

The following day he and his fireman were seated in the cab of the 7003 at Jersey City, waiting to leave, idly watching fleecy smoke billow out of the locomotive stack, filling that area of the great trainshed. Art had his feet cocked on the windowsill. Without turning around, he asked: "Hey, Charlie, when are you gonna call on your girl friend?"

Charlie made a studied effort to wipe the brass on his airbrake handle, pretending not to hear.

"It's none of my damn business," the ashcat persisted, "but if I was single I'd look her up myself."

"Well, I wouldn't," said Charlie.

Maybe, he mused, resting a hand on the throttle, *maybe she is lonely. Wonder what would happen if I go to see her on a day off?*

But he hesitated. The truth is that Charlie Braddock was woman-shy. Anybody could wave at a good-looking girl and throw off newspapers, but to talk with her called for more nerve than the engineer could muster. Suppose she didn't want his company? Maybe he was making a fool of himself right now. What if she was only bored with village school and made a practice of waving at all the trains? How could he find out?

The long-legged 7003 ate up the miles while Charlie debated with himself in agonies of indecision. Mid-June rolled around. The big engineer was still engaged in a vague, platonic courtship with a total stranger. Art Randall must have thought he was crazy. They passed the teacher as usual that day, with Art leaning on his scoop while Charlie tossed off the customary bundle of newspapers.

Afterward, Art said: "I guess that's the last time we'll see Cleopatra until September. The school kids go on vacation tomorrow."

"Tomorrow," the engineer repeated dully.

Mental pictures of the unknown young woman waiting there forlornly, faithfully, day after day, pricked his conscience. And then suddenly his indecision vanished. He realized for the first time that he was in love with a girl he'd never met, and he could not bear to face the future without her. The vision in white at Strawberry Hollow had finally purged his soul of Anne McPherson with her fat breasts and filthy tongue.

ON THE RUN to Jersey City that evening the engineer was singing softly to himself, *By the Banks of the Wabash.* He had made up his mind to buy a present, and as soon as he registered in he went shopping. He bought two pounds of *de luxe* chocolates in a gay red box and a red Japanese parasol to match. These he wrapped in the usual bundle of newspapers which he purchased the next day at the southern end of his run. An odd-looking package for a bashful wooer, but Charlie had put his heart into it.

Tucked into the package was a little note which said he wasn't married and would it be all right if he visited her on Thursday, his day off? If the answer was yes, would she please wrap a scarf around her neck?

INVESTIGATE ACCIDENTS

Train quickly for *repeat* income in the exciting, secure Claim Investigation and Claim Adjusting field. Our students and graduates are already earning $6 to $10 an hour SPARE TIME — and up to $10,000 a year Full Time. You need NO prior experience or higher education. And your age does NOT matter.

HERE IS YOUR CHANCE FOR ACTION AND REAL JOB SECURITY

As a trained Claim Investigator you will (1) INVESTIGATE FACTS and (2) DISTRIBUTE MONEY as the representative of wealthy organizations.

No other business offers you greater opportunities for success and security. Here's why: The huge, rapidly expanding Claim Investigation and Adjusting Profession right now distributes more money than any other service industry. And it's growing fast. Over 200 MILLION ACCIDENTS must be investigated this year for Insurance Companies, Airlines, Railroads, Steamship Lines, and Government Offices.

BE YOUR OWN BOSS

Investigate full time for one company — or open your own business from your home and earn up to $10 an hour as investigator for many companies. NO investment in equipment needed. We show you how. It's easy!

EARN WHILE YOU LEARN

SEND NOW for Big, FREE, illustrated Universal Schools Catalog. We will show you how simple it is for you to become a fully qualified Claim Investigator. At home in your leisure you can get know-how that used to take years to master. And the cost is low. You may earn while you learn. Many students have paid for the cost of their training — 3, 4, 5 times over — long before graduation. FREE employment help. No obligation on your part. No salesman will call. Send coupon TODAY. GI APPROVED.

UNIVERSAL SCHOOLS INC. **DALLAS 5, TEXAS**

MAIL NOW for FREE BOOK

UNIVERSAL SCHOOLS
6801 Hillcrest Avenue Dept. AM9
Dallas 5, Texas

Please rush me your FREE book on Claim Investigation. This does not obligate me and no salesman will call.
(APPROVED BY THE GOVERNMENT FOR KOREAN VETERANS)

Name _____ Age _____
Address _____
City _____ Zone _____ State _____

He showed the package to Art. "Think she'll like that?" he asked anxiously.

The ashcat pondered a moment. "I dunno. Girls go for such things as flowers and theater tickets and jewelry and silk stockings and perfume. But," he added hastily when he saw Charlie's face fall like a steam glass on a dying fire, "they like candy best of all. I never knew one who didn't."

Charlie sighed and stowed the treasure carefully in his seatbox. Twice during the run he opened the seatbox to inspect it. He was so eager to reach Strawberry Hollow that he overshot the seventy-mile limit. Art warned him that Superintendent Kennicott might be waiting anywhere along the line or even riding that very train.

The engineer slowed down, and in due time he tossed off the gift. The strange little lady picked it up, waved her thanks. The next day, when the New York Express roared northward past the school she was standing beside the right-of-way fence, wearing a broad smile and a red scarf and twirling the parasol coquettishly. Nearby on the grassy hillock stood the box of candy. Charlie's heart skipped a beat.

Well, that settled it. Come Thursday, the engineer shaved with meticulous care, dressed in his best, and inserted a white carnation into his buttonhole. Then he hired a horse and buggy from a Washington livery stable and drove along the dusty yellow road to Strawberry Hollow. He was humming to himself, *By the Banks of the Wabash.*

The girl met him outside the closed school. She appeared to be in her late twenties, had soft brown eyes, brown hair, and the most beautiful smiling face Charlie had even seen. From floppy straw hat to neat button shoes, her well-corseted figure was grace personified. A pink cameo brooch adorned the bulge of her left breast.

She held out a hand to the big bashful man to put him at ease. "My name is Edith Lane," she said gently, "and of course you are Charlie Braddock. I have waited a long time to meet you."

"And I am happy to see you, Miss Lane," he stuttered. "You don't know how much I enjoyed seeing you from the engine-cab window."

"I have a picture of the New York Express hung up in my bedroom. That's your train, isn't it, Mr. Braddock?"

"Yes, it is. I drive the Fast Mail from Jersey City to Washington at night and come back on the Express. I have the same engine both trips, the 7003. She's a beauty." He gulped. "Would you like to take a buggy ride, Miss Lane?"

"Indeed, I would, sir, thank you." She pointed shyly to a large basket. "I have brought a picnic lunch for us."

Charlie had left the buggy on the road. The horse was lazily swishing flies from its back and munching a bed of clover. Charlie picked up the basket. Together they walked to the buggy. The engineer clutched the girl's arm stiffly, repeatedly calling her "Miss Lane," but the warmth of her personality gradually melted his reserve.

Long before the sun went down that night in a flame of crimson glory they were holding hands and calling each other by first names. As the talk grew more confidential, Edith said something that was old-fashioned, almost melodramatic, and yet very sweet.

"I'll place a lighted lamp in my bedroom window for you to see every night you're on the Fast Mail so you'll know I am thinking of you, and I won't go to sleep until you pass."

ALMOST invariably his train was late in leaving Baltimore at night because so much mail was loaded and unloaded there. But somehow Charlie made up for lost time and was right on schedule when he whistled for Strawberry Hollow. The men called him a highball artist and there were rumblings of what would happen when Superintendent Kennicot caught up with him.

Swinging the Fast Mail through the sleeping village at high speed, Charlie would lean out the cab window exactly at midnight and peer into the darkness for a glimpse of Edith's twinkling lamp, which was about the only bright glow in town. Art knew what was going on, but the pinpoint of light meant nothing to the clerks sorting letters in the mail cars or the train crew riding a coach on the rear.

If Charlie had known the normal companionship of girls in his early years he might have been more discreet in wheeling the Mail from Baltimore to Strawberry Hollow. But Cupid plays some crazy pranks on people he meets for the first time near their middle years. Charlie regarded it as a test of his affection for Edith Lane to whistle for the Hollow exactly on schedule, even though, as in one case, he had to whip up the 7003 to ninety miles an hour to make up for time lost at Baltimore.

Kennicott was furious when the chief dispatcher sent him a report of excessive speed, and he summoned Engineer Braddock.

"The train sheet shows that the Mail made ninety last night," he said coldly. "Is that correct?"

"Yes, sir," Charlie admitted, "but—"

"The Maryland Division is not a racetrack. Seventy is our limit." The brass collar paused to let his words sink in. "That's all, Braddock. Next time you won't get off so easy."

So much for Kennicott's warning. But a week later, as Charlie searched the sky for the glow that marked the city of Baltimore at night, he was thinking of Edith and his reputation for being on time, and he kept rolling fast.

An illumination in the sky. Houses and shops clustered together. Electric lights. Baltimore. He closed the throttle. Art Randall turned on the blower, the artificial draft for the fire, and opened the firebox door. As his train glided into the station, Charlie climbed down to oil the engine.

Ten minutes passed. The ashcat stuck his head out the cab window and shouted: "You're gonna be late. The Mail ain't half loaded."

Charlie looked down along the train. A dozen baggage trucks were still heaped with mail. Tossing his oil can into the cab, he ran back among the men loading the train.

"Can't you fellows please get a move on?" he wheedled. "This train is late."

It did little good. He steamed out of Baltimore fourteen minutes behind schedule. Even before he left the yard he was doing fifty miles an hour. The exhaust roared. He widened on the throttle. The wheels spun faster.

Art shouted, "You're makin' eighty!"

"So what?" Charlie flung back.

All the way to Strawberry Hollow he kept the Mail at high speed, and precisely at midnight he yanked the whistle cord to salute Edith, whom he knew was awake and listening.

Tomorrow, he thought, *I'm going to propose. If she says yes, we'll marry and spend a honeymoon at Niagara Falls. But I still can't understand what happened last night.*

That little devil, Cupid, had been up to mischief again. Charlie had enjoyed a home-cooked dinner with his girl the night before, and while they were eating a blueberry pie he had lamented having to wait so long to enjoy home comforts.

"To think half my life is gone!" he sighed. "I should have had all this when I was younger."

Edith had given him a searching look, her mouth had tightened, and for a moment Charlie had thought she was going to cry. He could not guess what was going on in her mind. *I never did understand women,* he thought. *They get all mixed up with emotions,* and he let it go at that.

HE WAS still thinking of that sad expression on Edith's face when he dressed in a brand new suit for the trip to Strawberry Hollow. On his way out of the Railroad YMCA, where he lived, the desk clerk hailed him.

"Telephone message for you, sir. Mr. Kennicott wants to see you."

When Charlie stood before the superintendent a few minutes later, his sartorial elegance prompted Mr. Kennicott to inquire, "Going to a funeral."

The engineer was embarrassed. "No, sir. This is my day off and I am getting married."

"Getting married?"

"Yes, sir, if the lady will have me."

The official was visibly annoyed. "Braddock, if the lady doesn't say yes, I am going to give you plenty for having changed my plans."

Charlie waited. Mr. Kennicott drummed his fingers on the desk before explaining what he had in mind.

"Last night, Braddock, the train sheet shows you made eighty miles an hour from Baltimore to Strawberry Hollow. Is that right."

"Yes, sir, it is, Mr. Kennicott. I don't want the Mail to be late."

"Is that so? You pull out of Philadelphia, Wilmington, and Baltimore late almost every trip.

"Some nights there's a lot of mail to be loaded," explained the engineer. "But I get back on time before I go many miles. You see, sir, I'm sort of proud to bring the Mail in on time."

"On time be damned!" roared Mr. Kennicott, pounding his desk. "While I am superintendent of this division no train is going to jump the track from traveling at excessive speed. My mind was made up to give you sixty days' suspension without pay. Now get this straight: you're asking a woman to marry you. All right. For that reason I'm holding off on the suspension. But the next time you exceed the speed limit I'll slip you ninety days and demote you to freight service. That's all."

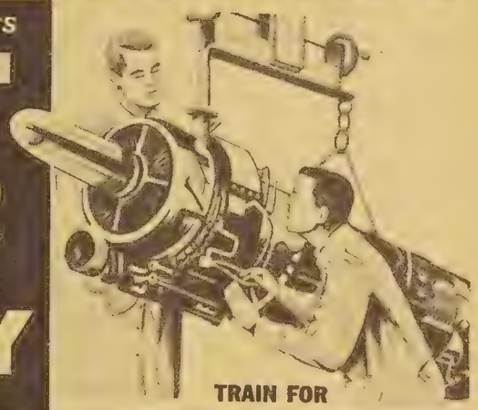
Later that day, when Charlie arrived at Strawberry Hollow and called at Edith's boarding house, the landlady opened the door.

MEN AGE 17 TO 45 OPPORTUNITY

To train at once for Careers IN

JET (GAS TURBINE) ENGINE INDUSTRY

Experience Unnecessary



TRAIN FOR FACTORY FIELD OR OFFICE CAREERS

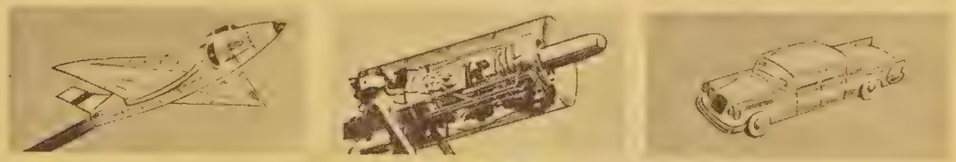
JET (Gas Turbine) Engine Industry . . . the power of the future . . . is here TODAY. JETS and TURBO-JETS are expected to sweep old-fashioned planes from the sky. GAS TURBINE (JET) ENGINE AIRCRAFT gains point to equal advances in other industries. If you are interested in mechanics in any form, opportunity is knocking **now** for YOU.

STAKE YOURSELF TO A FRONT-ROW SEAT IN THE NEW INDUSTRIAL REVOLUTION!

Jet (Gas Turbine) Engine Industry manufacturers employ thousands of men and are expanding. Great economies . . . new efficiency . . . spell heavy savings when adapted to fleets of trucks, bus lines, electric utility plants, agricultural machinery, etc. Make yourself a place in this tremendous future.

YEARS AHEAD and HERE NOW GAS TURBINE AUTOMOBILES The Gas Turbine Age Is On Its Way

THE PAST . . . first MILITARY USE in WORLD WAR II. THE PRESENT . . . CIVILIAN USE in AIRLINES . . . and in one of America's top automobiles. THE NEAR FUTURE . . . use in more cars, trucks, boats, farm equipment and many industrial applications.



COMPLETE TRAINING

Learn: WHAT A JET (GAS TURBINE) ENGINE IS HOW IT OPERATES • PRINCIPLES OF JET ENGINE DESIGN • FUNCTIONING ASPECTS OF BASIC ASSEMBLIES, DETAILED PARTS • VARIOUS SYSTEMS OF CONTROL • INSTALLATION • INSTRUMENTATION • REPAIR PROCEDURES • TURBO PROPS • FUEL REGULATOR SYSTEMS • ROCKETS MISSILES • No interruption of present job or schooling. ACT NOW.

RUSH MAIL AT ONCE

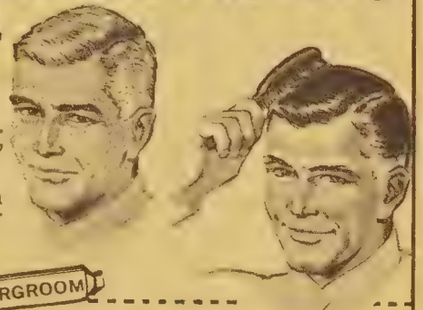
JET ENGINE TRAINING
UNIVERSAL SCHOOLS, DEPT. UJ22
11 EAST 47TH ST., NEW YORK 17, N.Y.

Without obligation to me, furnish full particulars

Name ..... Age....
(PRINT)
Address
City State

MEN: DON'T DYE YOUR GRAY HAIR LIKE A WOMAN'S!

GROOM IN YOUTHFUL MASCULINE COLOR



Men who have dyed their gray hair wish they hadn't. *They're stuck with the tell-tale dye which slowly fades leaving their hair streaked like a woman's.*

Now you can groom your hair each morning in seconds, and before your unbelieving eyes your hair has become not only natural, gleaming, healthy —it has regained your own youthful color. That's exactly what happens! As you rub in ColorGroom—just as you have been doing with your favorite hair dressing—it imparts to your hair the natural-looking color that will take off years from your appearance. And you're not stuck with ColorGroom. ColorGroom will not rub off on your pillow, yet a shampoo removes the color any time you wish. It's just as simple as that: ColorGroom is rich in lanolin, is not sticky or greasy. And it is NOT A DYE!

If you are not absolutely satisfied, return ColorGroom and get every penny back. Mailed in plain wrapper. © *1960 Brian-Lloyd Co.*

COLORGROOM

Brian-Lloyd Co., Dept. CG-18
11 East 47 Street, New York 17, N.Y.

Please send me a 30 day supply of ColorGroom in ☐ Black ☐ Brown ☐ Blond. I enclose $1.98. If I'm not satisfied that ColorGroom is all you say it is I may return it for full refund.

Name .....
Address .....
City ..... Zone ... State .....

"Oh, Mr. Braddock!" she wailed.

The engineer stared at her. "What happened?"

"Edith left a letter for you." The woman fished into a capacious pocket and handed it to him.

It was a cryptic letter, but one point was painfully clear. Edith had assumed mistakenly, because of Charlie's remark over the blueberry pie, that he didn't want to marry her and so she had accepted an offer to teach school in another part of the country and this was good-bye. The letter ended with, "We will never see each other again."

The engineer was dumfounded. "Where did she go?" he asked the landlady.

"I'm not right sure," replied the landlady. "Edith did say she was going to Jersey City first, and from there she would take a train to somewhere at 8:15 tomorrow night."

IN A DAZE he returned to Washington, walked the city streets trying to decide what to do, and finally, in utter exhaustion, fell asleep on a park bench. The next day he told the engine dispatcher: "Mark me off. I'm going away for a couple of days."

"I can't let you off now," he was told. "There isn't time to call another man for your run."

"Well, I can't work today," Charlie insisted. "I've got to be in Jersey City on very important personal business by eight fifteen."

The crew dispatcher grinned. "Okay, your train arrives at Jersey City at eight. What more do you want?"

Charlie argued further, but finally decided to make his regular run with the New York Express and take a chance on meeting Edith Lane at the Jersey City terminal before 8:15. So he donned his overalls without even stopping to take off his striped trousers and climbed into the high-wheeled 7003.

He patted the throttle almost affectionately. "You and me are going places," he muttered, "and fast."

Backing her into the yard, he learned to his dismay that his train had been held up by a hotbox and would be fifty minutes late.

"Fifty minutes?" he echoed.

"That's what I said," the yardmaster yawned, rolling a cigarette.

Charlie felt as if he were being choked. He staggered outside, slumped onto a bench. His passenger job would be shot if he exceeded speed restrictions again, and yet Edith would be at the train gates in Jersey City, going away on the 8:15!

He was almost in tears when, eventually, he backed the 7003 into the trainshed and coupled onto a string of cars. It seemed to him that there was twice as much baggage and mail as usual. Everything was against him.

Grabbing the long-necked oiler, he dropped to the ground. As he inspected the engine, he calculated that the best he could make up was thirty minutes—that is, if he stayed within the speed limit. Thirty minutes won back would still leave him twenty minutes late arriving at Jersey City.

The oiling was interrupted by the appearance of Superintendent Kennicott and Trainmaster Reynolds.

"Handle this train with kid gloves," Mr. Kennicott ordered. "The president's private car is on the rear. He's going to New York. This railroad boasts of its smooth riding."

Charlie glanced at his watch. "We're fifty-five minutes late already. Doesn't the Old Man care what time he gets to New York?"

"He has an engagement for ten o'clock," Reynolds cut in, "and it's with his family. He has plenty of time."

The two officials walked away. Charlie was discouraged. Apparently no one but himself gave a damn about time. Even the head of the Pennsylvania Railroad didn't care to arrive on schedule. The New York Express finally pulled out of Washington an hour late.

POUNDING through the maze of tracks in the yard, Charlie realized his critical position. If he was not in Jersey City at 8 p.m. or 8:15 at the latest, Edith would take that train. She wouldn't wait for him; she didn't even know he was on the way to her.

"Green," Art called a signal.

"Green," Charlie repeated.

The train boomed by the yard-limit board. Ahead lay the open country and clear track. Forty-odd miles to Baltimore, the next stop. The driving wheels of the fast Atlantic had settled to their gait and were rolling at seventy per.

Street lights loomed ahead. Charlie pulled on the whistle rope, and the train roared through the town.

Art shouted across the cab. "We've covered six miles and you've made up only a minute. Kennicott's got you over a barrel!"

There was no answer from the right-hand side of the cab. Five minutes later they sped through Strawberry Hollow. Charlie saw Edith's house. There was no lamp in the window tonight. He tugged at the throttle impatiently.

More steam entered the cylinders. The side rods danced a wilder rhythm, the wheels turned faster. The exhaust from the stub stack became a steady roar. Seventy-five, eighty, eighty-five miles an hour!

As he stoked the engine, Art lost his balance when they swung around a curve. He missed the firebox door, spilled the shovel of coal on the deck.

"Hey, Charlie, what the hell?"

There was no answer. The ashcat watched telegraph poles, billboards, trees, and houses passing in a blur, and he rushed across the cab.

"Don't be crazy!" he shouted. "We've got Kennicott, Reynolds, and the Old Man himself on this train. They'll pull the air on you."

"You just make steam," said Charlie, giving the throttle another yank.

"You must be doin' ninety!"

"I am. We're late." The engineer kept his gaze on the shining steel rails ahead. Mile after mile they roared through the night. Art kept shoveling coal.

They covered the forty miles from the nation's capital to Baltimore in thirty minutes flat. When he ground to a stop in the Baltimore depot he had made up twenty minutes. While the mail and baggage were being loaded, Charlie glanced out the cab window. He saw the stationmaster rush toward the private car on the rear, waving a telegram. A few minutes later Kennicott and Reynolds came up to him on the run.

"This time," said Kennicott, "you win. The president's son has been taken to a New York hospital for an emergency operation, and the Old Man wants to get there as fast as you can make it. No speed limit for you tonight, Braddock. He is giving you the road!"

"Remember, Braddock," the trainmaster emphasized, "it's the president's orders that you run as fast as you can."

"I understand," Charlie grinned. "Tell him he'll be in Jersey City by eight o'clock."

The conductor gave a highball. Charlie released the airbrakes and opened the throttle. He was plainly excited.

"Art, we've got to be in Jersey City by eight. Understand? Everything depends on our getting there."

FASTER and faster the wheels revolved; the exhaust became a roar. Ahead lay 185 miles of railroad upon which hundreds of trains were moving.

Over that track, and by those trains, it would be necessary to run, to hit a speed of over ninety miles an hour!

Racing through the suburbs of Baltimore, Charlie swung into seventy miles an hour. He had two hours and forty minutes to make Jersey City—185 miles in 160 minutes! There would be slowdowns at Havre de Grace and Wilmington, and miles of reduced speed through Philadelphia, precious time lost that would have to be made up on the open stretches.

Charlie knew that the train dispatcher's office was busy. With scarcely a moment's notice, DS cleared the track. Grabbing the whistle rope, the engineer blew for a crossing. The Limited was on the siding!

"They got Two in for us," he shouted to the fireman, and gave the throttle another tug. Speed! Speed!

Small towns, and then Wilmington. Crash of wheels over switches. Clear signals. The station a blur. Again the open country. And then, as they swung around a curve a few miles east of Wilmington, a yellow caution signal hit them in the face. It was the distant board at XO tower.

"Yellow!" Art called across the cab.

"Yellow," repeated Charlie. His hand tightened on the throttle. To reduce speed would mean priceless minutes lost. By the time they rolled to the tower maybe the "bug" would go clear. It would be a long chance. Suppose it were red?

Charlie, drunk with speed and ready to risk anything to make Jersey City by eight, was tempted to take the chance. But first of all he was an engineer. In went the throttle, and on screeched the brakes. A moment later the block at XO loomed out of the dusk—*and it was red!*

The tower man, seeing Charlie slow up, threw the board clear, and then came down beside the track. He had an order to deliver. Art swung down on the step and snatched the tissue as the engineer passed by the towerman. With two blasts of the whistle, Charlie was off again.

"Read this," said the fireman, entering the cab and standing beside the engineer. A broken rail two miles east was being replaced. Caution must be exercised until they passed the track gang.

"Ten whole minutes shot to hell," the engineer groaned.

They approached the spot, moved safely over the danger zone, and then set out for Philadelphia at high speed. Art had all he could do to maintain his balance on the swaying deck as he fired the engine. More than once the shovel missed the boiler door.

"How fast do you think we're goin'?" he called across the cab.

Charlie yelled, "Around ninety."

"Ninety my eye! It's over a hundred."

RAIN. A fine drizzle. A myriad of switch target lights. Semaphores gleaming red, yellow and green. A glow in the sky. Houses clustered together. The city of Philadelphia.

Six forty-five, with Charlie pinching down the speed through the yards. Clear signals. West Philadelphia. Over the maze of tracks. Then through North Philadelphia, and the open country again. The throttle was pulled wide. Charlie Braddock's run would go down in history. He was singing to himself, *By the Banks of the Wabash.*

The boom of the exhaust, the roar of the fire glowing white, the clang of the shovel striking the metal of the boiler door frame, the whistle screaming, and Charlie Braddock in the cab of the high-wheeled 7003 going to town!

"Hey, Charlie!" Art shouted across the rocking cab as a milepost whizzed by. "I been timing us. *You just made a mile in thirty-two seconds!*"

"I know it."

The fireboy stared at his engineer. What nerve! Driving over 115 miles an hour to get a railroad president to his son's bedside. One mishap, a loose rail, a bad switch, a curve taken at too high speed, and they would be ditched!

They were approaching the water pans between Plainsboro and Princeton Junction now—long troughs between the rails in which a "dipper" under the tender was lowered. Thus water was forced into the tank at high speed.

Art Randall took his post at the lever on the tender, ready to drop the scoop the instant they struck the pans. He watched Charlie. When the engineer showed little intention of reducing speed, Art yelled: "Hey! Knock her down! The way you're goin' you won't get a drop."

To take on water successfully, a train should not be running more than fifty miles an hour.

Charlie screwed his face with annoyance. Minutes, even seconds, were too precious to waste.

"When I holler," he instructed, "you drop that scoop."

DON'T PAY FOR THESE GREAT SHOES

Select this handsome Tartan Grain with Air Cushion and Arch Support . . . or any other style from our tremendous stock.

GET THEM WITHOUT COST AS A REWARD —PLUS THE CHANCE TO "BE BOSS" OF YOUR OWN $10,000 A YEAR SHOE BUSINESS!

Sell friends Work, Dress, Casual Shoes and Boots in spare time. No investment, no overhead, no stock to carry. Simple 2-finger demonstration of patented AIR CUSHION comfort makes shoe selling a snap! Actual shoe samples supplied.

Ankle high brushed leather Casual with double Air Cushion

New! Swirl Front Air Cushion Loafer — the first adjustable Slip-on!

Ladies' Air Cushion Casuals and smart, dressy styles

WE BACK YOU WITH OVER A QUARTER MILLION PAIRS IN STOCK! Show America's greatest values in newest all-day comfort shoes for men, women and children. Over 180 styles. Sizes 4 to 18, widths AAAA to EEEE. Sell full time if you wish, or spare time if now employed. Develop an extra income for life! Advance Commissions to $5.00 a pair, plus big Bonus and other rewards. Get your own shoes as "extras" at no cost!

SHOW MIRACLE VALUE $8.95 & $9.95 MEN'S DRESS SHOES! Our own new "Jet Age" equipment makes such values possible. Exclusive Storm Seal'd process that keeps feet dry in wet weather, full glove leather lining, Nylon stitching, keep repeat orders rolling in again and again.

SEND FOR NEW SELLING OUTFIT! Write NOW if you want the security and big steady income of a business of your own. You can't lose — so act today!

CHARLES CHESTER SHOE CO.
Dept. K-022, Brockton 64, Mass.

MAIL COUPON RIGHT THIS MINUTE!

CHARLES CHESTER SHOE CO.
Dept. K-022, Brockton 64, Mass.
I want to make spare time money. Send all equipment I need—without obligation—and tell me how I can get my own shoes without cost.

Name_____

Address_____

City_____ Zone____ State____

Charlie moved the airbrake handle. The air slapped on. Fire shot from the wheels. The speed dropped to sixty.

"Down!" he shouted.

The ashcat hesitated a moment, then moved the lever. The scoop under the tender of the 7003 hit the trough. A fan of water shot up. Charlie looked back to the rear of the tender. When the water, shooting up the manhole, overflowed the tank he cried out, "Up!"

Once more the train was racing ahead. Signals were gleaming on semaphore bridges against the dark heavens. Green, always green! Thank God!

Lights ahead. An illumination in the sky—Newark. Still eighty miles an hour. The yard-limit board at Jersey City. Reduced speed. Brakes pressed against the wheels, making circles of fire.

Charlie closed the throttle, kicked on the air. The iron monster ground to a halt in the Jersey City trainshed at exactly eight o'clock!

The president of the Pennsylvania Railroad, leaving the train, had to pass puffing 7003. He met big Charlie Braddock sliding down from the cab, and together they hurried through the crowd toward the exit.

"I'm proud of you," said the chief. "You did something tonight I'll never forget."

But Charlie wasn't listening. He had just caught a glimpse of Edith Lane waiting at the train gate. ●

Hi-Fi Railroad Recordings

by FRANK DONOVAN, JR.

THE MARKED INCREASE in railroad disks in the last few years is due almost entirely to the rapid eclipse of steam. By coincidence, high-fidelity recording arrived as the iron horse was fading into history, coming just in time to be a superb vehicle for preserving nostalgic sounds of the old locomotives for posterity. Thus hi-fi gives a stimulus to rail recording, which had gone into a bad slump.

My interest in railroad phonograph records began when I listed them for the September, 1937, issue of *Railroad Magazine*. About 98 percent of that original list were vocal songs or "the blues." Today, nearly 75 percent of the platters with exclusively railroad themes are featuring steam engine sounds. Not more than half a dozen selections, at best, deal with diesel or electric operation. About 15 percent are songs.

The railroad records of the late '30's were far more numerous than those of today, in both diversity of titles and gross output. On the other hand, there may be from six to a dozen items on one side of a long-playing record, whereas the earlier disks had only one or two. Even at that, railroad ballads have lost their oldtime popularity. The interest that railfans currently show in "steam" recordings does not entirely make up for the decline in folksongs of yesteryear.

The status of the rail record is still far from stable. While the old ten-inch, 78-rpm disk is almost extinct, the "one sound source recording" (monophonic) is being superseded by "two (or three) sound source" stereophonic records or tapes. Shops report that up to 30 percent of their record sales are stereo, while stereo-phonograph players are now being made and sold in greater number than are the monophonic type.

Although rather few railroad selections today are in stereo, that form is fast winning favor with rail buffs. Stereo gives you that realistic extra sound track—a clarity, depth, and luster which mono cannot match. The latter, when contrasted with stereophonic recordings, is like listening to train sounds with one ear covered. The full impact is not there.

The question is asked: what will happen to railroad diskography when steam records have run their course? Diesels have taken over in actual railroading, but no internal-combustion engine can hope to rival steam on hi-fi or stereo—or photographically, for that matter.

Part of the gap may be filled eventually by a medley of railroad sounds from cab to caboose plus the staccato voice of a train dispatcher, the sharp directives of a yardmaster, the drone of an automatic train-caller, and the salty shop talk of trainmen.

Then, too, the railroad ballad and folksong may emerge with heightened interest. Such favorites of long ago as *The Freight Wreck at Altoona*, *The Little Red Caboose Behind the Train*, and *The Wreck of the Old 97* are virtually non-existent on hi-fi or stereo.

One of the fairly recent albums in that field, *Songs of the Railroad*, has a special appeal for *Railroad Magazine* readers because your editor, Freeman Hubbard, had a finger in the pie. Hubbard helped to select the songs, including several that are not widely known, in addition to the old stand-bys. He also attended the studio-recording sessions and wrote the text matter that is printed on the jacket. His favorite railroad ballad, he tells me, is *Big Rock Candy Mountains*.

None of the hi-fi sound recordings, so far as I know, were made by railroad employes, except for *A Symphony in Steam*, co-produced by Harold K. Vollrath, a Louisiana & Arkansas train dispatcher. Much credit should be given to such distinguished buffs as Howard Fogg, Stan Kistler, O. Winston Link, E. P. Ripley, Allen Sherry, David Swindells, and William A. Steventon, who have created railroad sound disks worthy, I think, of being included in the National Archives.

I have said that interest in the old 78-rpm ten-inchers was almost extinct, and that is true. But Steventon, operating as the Railroad Record Club, Hawkins, Wis., has been putting out an excellent line of 33⅓ LP ten-inchers that more and more connoisseurs are coming to appreciate. Mostly, they memorialize the haunting sounds of steam power. All titles are listed here.

Diesels, CTC, and push-button yards are making the railroads less and less romantic as time passes. The golden age of railroad lore and folksongs was the boomer era. Yet even today the sound-dramas of modern recordings capture the oldtime spirit just as surely as do the traditional songs of yesteryear. At any rate, the vanishing of steam has refocused attention on nearly all types of rail recording. It seems

likely that sustained interest in hi-fi and stereo "railroading" will continue for a long time into the future.

In the following list all records are 12-inch, 33⅓ rpm, unless otherwise noted. Stereo is so indicated. Your author will appreciate additions and corrections sent to this magazine.

AUDIO FIDELITY, INC., 770 11th Ave., New York 19, N. Y. "Railroad Sounds," $5.95. Stereo, $6.95. Diesel operation on Illinois main line, Chicago-New Orleans.

CABOT RECORDS, INC., 116 Central Park South, New York N. Y. "Songs of the Railroad," $4.98. Big Rock Candy Mountains, I've Been Working On the Railroad, Wabash Cannon Ball, many others, sung by Merrill Jay Singers.

C & V PRODUCTIONS, 2524 Meriwether Rd., Shreveport, La. "A Symphony in Steam," $5. Baldwin 2-8-2 on a Texas lumber road.

COLUMBIA RECORDS, INC., 799 Seventh Ave., New York 19, N. Y. "Debussy, Ravel, Strauss," CL 798, $3.98. Contains Villa-Lobos' "Little Train of Caipira," an orchestral impression.

COOK LABORATORIES, INC., 101 Second St., Stamford, Conn., "Rail Dynamics," $4.98. Stereo, $5.98. New York Central steam, diesel, and electric locomotive noises.

"Pacific 231," 10683, $3.98. Honegger's orchestral rendition of locomotive sounds. (Also includes Barber's Adagio; Debussy's Danse, Nocturnes, and Prelude.)

DAVIDSON-CLAY CO., 2105 Sterick Bldg., Memphis 3, Tenn. "Engineer Casey Jones' Last Trip," 10-inch, 78 rpm, 2 records, $4.25 the set. Related by Sim Webb, Casey's last fireman.

EPIC RECORDS, 243 W 72nd St., New York 25, N. Y. "Little Train of the Caipira," LO 3626, $4.95. BC 1047, stereo, $5.95. Played by Cleveland Pops Orchestra.

EVEREST RECORDS, 360 Lexington Ave., New York, N. Y. "Little Train of the Caipira," $4.40. Same price in stereo. Played by London Symphony Orchestra.

FOGG RECORDINGS, HOWARD. 2320 Balsam Ave., Boulder, Colo. "All Steamed Up," $5.95. Jacket has color print of a Fogg oil painting of Burlington No. 5506. Colorado & Southern steam engines.

FOLKWAYS RECORD & SERVICE CORP., 117 W. 46th St., New York 36, N. Y. "American Folk Songs for Children," FP 701, 10-inch, $4.25. Only one railroad song, Train is A-coming.

"Anthology of Negro Poets," FP 90, $5.55. Only one railroad selection, John Henry.

"Country Dance Music Washboard Band," FP 601, 10-inch, $4.25. Only one railroad song, John Henry.

"Folk Songs and Ballads of Virginia," FP 47/3, 10-inch, $4.25. Only one railroad song, Railroad Bill.

"Folk Songs for Camp," (Juvenile) FP 730, 10-inch, $4.25. Only one railroad song, Train is A-Coming.

"Negro Folk Music of Alabama," (Vol. 3), P 471, $5.95. Contains John Henry and other railroad work songs.

"900 Miles and Other Railroad Ballads," FP 13, 10-inch, $4.25. Includes Wreck of the '97, Hobo Bill, The Brave Engineer, and others.

"Ohio Valley Ballads," FP 23/2, 10-inch, $4.25. Only one railroad song, John Henry.

"The Original Talking Union," FP 85/1, $5.95. Contains Casey Jones and Union Train.

"Rock Island Line," (Lead Belly Legacy, Vol. 2), 10-inch, $4.25. Title song is only railroad selection.

"6 Frontier Ballads," (Vol. 2) FP 48/6, 10-inch, $4.25. Only one railroad song, Paddy Works on the Railways.

"Smoky Mountain Ballads," FP 40, 10-inch, $4.25. Only one railroad selection, Swannanoa Tunnel.

"Songs to Grow On," (School Days, Vol. 2) FP 20, 10-inch, $4.25. Only one railroad song, Rock Island Line.

"Songs to Grown On," (This Is My Land, Vol. 3, Juvenile), FP 27, 10-inch, $4.25. Only one railroad song, Jerry, Oil That Car.

"Sounds of Steam Locomotives," Vol. IV, $5.95. Hudsons, Mohawks and Niagaras on the New York Central at Vermillion, Ohio.

"Sounds of Steam Locomotives." No. 1, $5.95. Mostly on Burlington and UP, with parts on IC, C&NW, and D&RGW narrow gage.

"Sounds of Steam Locomotives," No. 2, $5.95. Burlington Mikados near Lincoln, Neb.

GOLDEN RECORDS, 630 Fifth Ave., New York 1. N. Y. "A Golden Treasury of Train Songs," GLP 33, $1.98. (Juvenile) Twelve railroad songs including Down By the Station, Gandy Dancers' Ball, John Henry, Drill Ye Tarriers, and Paddy Works on the Railroad.

"Songs About Heroes," $1.98. (Juvenile) Two railroad items. Casey Jones and John Henry.

HIGH FIDELITY RECORDING, INC., 7803 Sunset Blvd., Hollywood, Calif. "I've Been Working on the Railroad—A Farewell to Steam," $4.98 Stereo, $5.98: Santa Fe, Los Angeles-Barstow; SP at Santa Barbara and San Bernardino-Barstow

KISTLER, STAN, Box 4068, Pasadena, Calif. "Big Boy," $5. UP steam engines, helpers, and work trains on main line.

"Farewell to Steam." $4.98. Last run of Sante Fe 4-8-4, Los Angeles to Barstow, in 1955.

"Freight Service Only," $5. Steam locomotives on Rio Grande narrow gage, C&S and Great Western (Colorado).

"Whistles in the Woods," $5. Standard and narrow-gage locos on lumber roads in Pacific Northwest, featuring Heislers, Shays, Mallets.

LINK, O. WINSTON, 58 E 34th St., New York 16, N. Y. "The Fading Giant," $4.95. N&W steam passenger trains, the Abingdon mixed, etc.

"Sounds of Steam Railroading," $4.95. Train calling to sounds of 150-car N&W coal trains.

"Thunder on the Blue Ridge," $4.95. Stereo, $5.95. Articulated double-headers and pushers on N&W main line.

LONDON RECORDS, INC., 539 W 25th St., New York 1, N. Y. "Pacific 231," $3.98. Arthur Honegger's orchestral rendition of locomotive sounds played by the Paris Conserv. Orch.

McLEOD, FRED, 1068 Fifth St., Oakmont, Pa. "Record No. 50," 10-inch, 78 rpm, $2. Steam on D&H, NYC, and Grand Trunk Western.

"Record No. 51," 10-inch, 78 rpm, $2. Steam on B&O, Erie, and Pennsy.

MERCURY RECORDS, 35 E. Wacker Drive, Chicago 5, Ill. "Take the Train," $3.98. Railroad songs played by a jazz band.

MINLOCO PRODUCTIONS, Box 2991, Auckland, New Zealand. "Steam Chant," $4.50 ($6 in Canada). Steam passenger suburban trains on the 3'6"-gage New Zealand Government Railways.

MOBILE FIDELITY, P. O. Box 1156, Burbank, Calif. "Great Moments of Steam Railroading," $5. Wide variety of motive power on B&O, C&S, CN, N&W, UP, etc. Narrated by Robt. Wilkinson.

"Highball," $5. In stereo, $6. Steam on Great Western (Colorado), Santa Maria Valley, Sierra, C&S, and UP. Jim Ameche narrator.

"Memories in Steam," $5. All Southern Pacific cast.

"Steam in Colorado," $5. Covers five railroads.

NORTH JERSEY RECORDINGS, Box 2, Maplewood, N. J. "Colorado & Southern Steam," $4.95. Features Consolidations, Mikes, and Santa Fe types.

"Fast Freight on the Nickel Plate," $4.95. Steam on NKP, Grand Trunk Western, and DM&IR.

"Rio Grande Narrow Gauge," $4.95. Steam on Rocky Mountain Railroad Club special in 1958 plus other D&RGW operations.

"Rods, Wheels and Whistles," $4.95. Steam commuter trains on N.Y. & Long Branch, also N&W steam in Virginia.

PUGET SOUND RAILWAY HISTORICAL ASSOCIATION, INC., 3008 Harvard Ave., N., Seattle 2, Wash. "Steam in Twilight," $4.95. With NP motive power pamphlet by L. F. Blanchard. Last days of steam on NO's Tacoma Division.

RAILFAN RECORDS, 119 No. Birchwood Ave., Louisville 6, Ky. "Local Freight," $4.98. Steam freight on B&O, St. Louis Division.

RAILWAY & LOCOMOTIVE HISTORICAL SOCIETY, INC., 15025 Oxnard St., Van Nuys, Calif. (Recorded by E. P. Ripley) "Steam Echoes," $4.95. With illustrated booklet by John Hungerford. Steam power on SP and UP in the West and Canadian National in Ontario.

"Whistles West," $4.95. Steam locomotives and their whistles on Santa Fe, SP, UP, WP, etc.

RAILWAY LABOR EXECUTIVES' ASSOCIATION, Railway Labor Bldg., 400 1st St. N.W., Washington 1, D. C. "Chicago Report" and "Featherbedding: Myth or Reality?", $2.50.

RCA-VICTOR, 430 Fifth Ave., New York 20, N. Y. "Train Whistle Blues," $3.98. Hill-billy, sung by Jimmie Rodgers.

REPP RECORDS, STAN, Box 1614-DS, Manhattan Beach, Calif. "Men of Steam," $5. Interviews with engineers of famous steam trains on the IC, PRR, and SP, telling about their work with locomotives.

RIVERSIDE RECORDS, 418 W 49th St., New York 19, N. Y. "The Great American Bum," $4.98. Hobo songs rendered by John Greenway.

RONDO RECORDS, INC., 220 Locust St., Chicago 10, Ill. "Pacific 231," 502. Stereo, $4.98. Honegger's locomotive composition of locomotive sounds. (Also includes Barber's Adagio, Stravinsky's Concerto.)

ROUNDHOUSE RECORDS, P. O. Box 326, Royal Oak, Michigan. "Detroit Division," $4.95. Grand Trunk Western Steam.

SHERRY ALLAN, 5445 Netherland Av., Riverdale 71, N. Y. "Extra 1235 East." $4.95. Doubleheading steam operation.

STEREO SPECTRUM RECORDS, 565 5th Ave., N. Y. City, "Holiday in New York," stereo $2.98. Short section on Times Square Subway Station sounds and those of a miniature railroad.

STEVENTON, WILLIAM A., Railroad Record Club, Hawkins, Wis. (All 10-inch records. Unless otherwise indicated, each sells at $5.25. Reduced rates if ordered in quantity.)

"Record No. 1." Steam switchers on Omaha Road at Spooner, Wis., and on Wabash at Bluffs, Ill.

"Record No. 2." Waterloo, Cedar Falls & Northern interurban car No. 100; Southern Iowa Ry. car No. 9.

"Record No. 3." East Broad Top and D&RGW narrow-gage steam.

"Record No. 4." B&O steam and diesel.

"Record No. 5." D&RGW narrow-gage steam, Chama, N. M., to Cumberes.

"Record No. 6." Potomac Edison interurban in Maryland.

"Record No. 7." IC and N&W steam.

"Record No. 8." Canadian National steam.

"Record No. 9." Steam on Gainesville Midland, N&W and Southern.

"Record No. 10." Pennsy steam.

"Record No. 11." Shaker Heights Rapid Transit electric operation.

"Record No. 12." Duluth, Missabe & Iron Range steam.

"Soo Line-Illinois Central Steam Power," $4. Modern steam power.

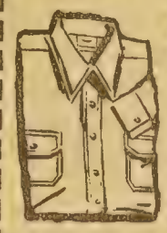
WESTMINSTER RECORDING CO., INC., 275 Seventh Ave., New York, N. Y. "Pacific 231," 7010, $4.98. Honegger's orchestral sound of a Pacific-type locomotive. (Also includes Rugby, Mouvement Symphonique No. 3, Prelude Pour "La Tempete.")

"Pacific 231," 18486. $4.98. (Also includes Chant du Jolie and Pastorale d'Ete)

YOUNG PEOPLE'S RECORDS—CHILDREN'S RECORD GUILD 100 Sixth Ave., New York 13, N. Y "Chisholm Trail." $2.98. Contains "Paddy" and "Working on the Railroad."

SAVE 75% on WORK CLOTHES!

Terrific Values You've Got To See To Believe!

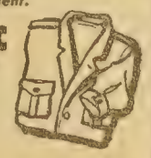


SHIRTS 79¢
4 for $2.99
What a buy! Made to sell for 2.99. Now, get 4 for the price of one! Tho used, they're washed, sterilized, pressed, and ready for long, tough wear! In blue, tan or green.
Send neck size, 1st and 2nd color choice.

PANTS 99¢
to match 4 for $3.75
Think of it! Heavy-duty cotton twill pants that sold for 3.85! Now, fully reconditioned and yours at this rock-bottom price!
Send waist measure and inside leg length.

MEN'S COVERALLS
Wear'em used and save plenty! You can't beat this bargain anywhere! The best made. Sold for 6.95. Now... wow!... what savings!
Send chest measurement.
$2.29
3 for $6.75

Unlined WORK JACKETS 99¢
3 for $2.75
Popular Eisenhower type. Four pockets. Heavy-weight twill. In good, solid condition for plenty of rugged wear! Blue only.
Send chest measurement.



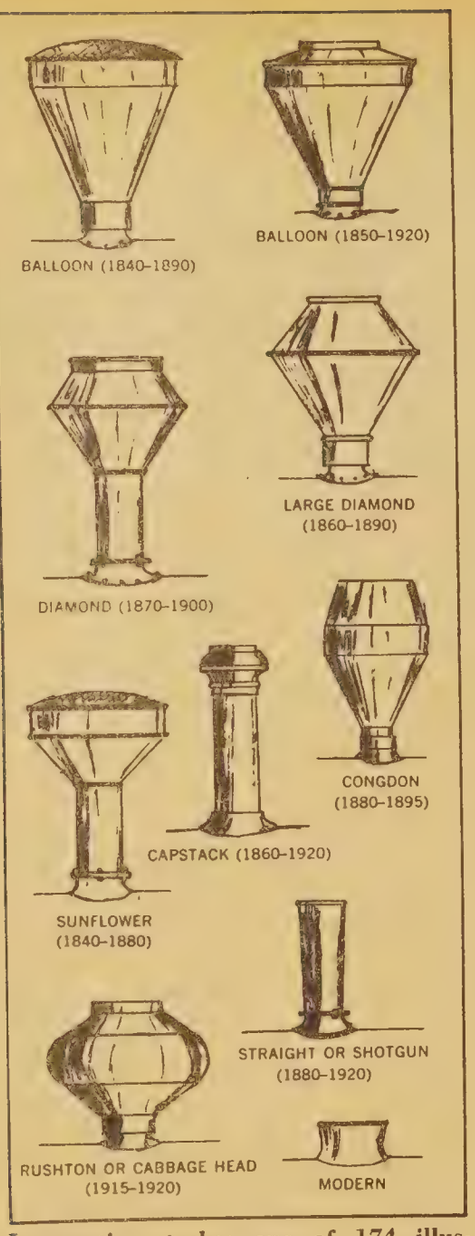
SHOP COATS—Like brand new!
Send chest measurement.
$1.79
3 for $5.00

LADIES' COVERALLS—Though used, in perfect condition!
Send dress size.
$1.49
3 for $4.00

MONEY BACK GUARANTEE . . . if not satisfied! That's our way of doing business! You can't lose! So order TODAY. Send $1.00 deposit on C.O.D. orders. Add 50¢ for postage on prepaid orders.

GALCO SALES CO. Dept. 4010
7120 HARVARD AVENUE • CLEVELAND 5, OHIO

Books of the Rails



Locomotive stacks: one of 174 illustrations in a new book for boys, Railroads in the Days of Steam, just out.
Drawn by D. W. Beadle (see Switch List)

RAILROADS IN THE DAYS OF STEAM, by Albert L. McCready and the editors of *American Heritage*, with Lawrence W. Sagle, consultant; 153 pages, 10½ x 7¼", hard covers, 170 illustrations (64 in full color), with index and bibliography, American Heritage Publishing Co., 551 5th Ave., New York City, $3.50. (Goldencraft edition for libraries, special buckram binding, $3.79.)

Over the years we have seen hundreds of railroad books but none that could match this one for richness of colored illustrations. *Railroads in the Days of Steam* is the third volume in the American Heritage Junior Library series. It appeals to youngsters with a high IQ and its pictures would fascinate adult railfans. The 30,000 words of text matter by Al McCready, a *Railroad Magazine* contributor, are lively and informative.

"The steam locomotive is part of American history," he writes, "and Americans will never forget it. Nor will they forget the engine's long sweet whistle, sounding in the night, with its call to adventure and its promise of success."

For sheer pictorial beauty, this is a book we'd be proud to give to any intelligent boy of Junior High School age.

FIDDLETOWN & COPPEROPOLIS: The Life and Times of an Uncommon Carrier, cartoons by Carl Fallberg, foreword by Lucius Beebe, clothbound, 144 pages, 6¼ x 9½", Hungerford Press, 6951 Reseda Blvd., Reseda, Calif., $7.95 (add 32c tax in Calif.).

For nearly six years Railroad Magazine published Fallberg's narrow-gage *Fiddletown & Copperopolis* cartoons, one quaint situation after another, a new picture each month. They were popular from the start, and long after *F&C* service was suspended, our readers begged for their return in book form. Now, with new cartoons added to the original series, that desire is being satisfied. The Fallberg whimsical humor is unique in the realm of railroadiana and, to us, like *Punch* at its best.

LINCOLN'S JOURNEY TO GREATNESS: A Factual Account of the 12-Day Inaugural Trip, by Victor Searcher, 279 pages, illustrated with railroad photos, clothbound, indexed, John C. Winston Co., 1010 Arch St., Philadelphia, Pa., $4.50.

Although your editor, Freeman Hubbard, once authored a Lincoln book which sold well (*Vinnie Ream and Mr. Lincoln*, McGraw-Hill, New York), he cannot explain the unflagging and long-continued interest of so many people in the Civil War period. The interest is very real, however, and leads to the publication of at least one new book a week dealing with that period, not to mention TV programs.

Lincoln's Journey to Greatness is being read by railfans and students of railroad history because it goes into details. Did you know, for example, that Abe Lincoln traveled by over 25 different railroads on his 1,904-mile trip from Springfield, Ill., to Washington, D.C., to take his first oath of office as President? The book lists those roads. To make a similar roundabout trip today you would use the Pennsy, NYC, Wabash, D&H, and B&O. Lincoln's ride in 1861 was broken by nine overnight stops.

OUTLOOK FOR THE RAILROADS, edited by Poyntz Tyler (Reference Shelf Vol. 32, No. 3), 208 pages, clothbound, with bibliography, H. W. Wilson, 950 University Ave., New York City, $2.50.

Twenty-two well-chosen articles by various authors that shed light on the railroad industry. Two were written by Stewart H. Holbrook, *Railroad Magazine* contributor, two others by one of our former associate editors, Gilbert Burck, now with *Fortune* magazine. A book for serious readers.

MODEL RAILWAYS AS A PASTIME, by Gerald Pollinger, 136 pages, illustrated, with bibliography, etc., Taplinger Publishing Co., Inc., 119 W. 57th St., New York City, $3.

Helpful guide to a popular hobby.

BALDWIN LOCOMOTIVE WORKS: Illustrated Catalogue of Locomotives (published originally by J. B. Lippincott & Co. in 1881); an exact reproduction of the original, superbly cloth bound, 148 red-bordered pages, 7½ x 10¾", history of Baldwin Works, well illustrated, photos, line cuts, specifications, other data, foreword by Grahame Hardy; Howell-North Books, 1050 Parker St., Berkeley 10, Calif., $10.

A beautiful, accurate and useful addition to any steam fan's library.

BULLETIN 102, edited by Charles E. Fisher, 78 pages, illustrated with rare old photos, The Railway & Locomotive Historical Society, Inc., Baker library, Harvard Business School, Boston, Mass., price to members $2; non-members, $3.

A choice collection of railroad lore: historical chapters on the L&N, the Kahului Railroad, early NP Consolidation locos, many others. All R&LHS Bulletins are rich sources of reference material.

THREE LITTLE LINES, by Josie Moore Crum, 71 pages, illustrated with maps and photos, good paper, *Durango Herald-News*, Box 61, Durango, Colo., $2.

A finely-flavored account of three narrow-gages, the Silverton, the Silverton, Gladston & Northerly, and the Silverton Northern.

LIMA LOCOMOTIVES, 47 pages, illustrated, Pacific Railway Journay, 2304 Melville Dr., San Marino 9, Calif., $3.

In 1911 the Lima Locomotive & Machine Co. published a catalogue of the rod locomotives they had built, intended for industrial line purchasers. The *Pacific Railway Journal* has added an accurate reproduction of that book to its series of publications. Featured are Shays, tank locomotives, and steam storage engines, with photos and dimen-

sions. Photo reproductions are excellent. An important reference work for libraries and students of locomotive lore.

THE ROCKY MOUNTAIN OFFICIAL RAILWAY GUIDE (Feb., 1906, edition), 116 pages, *Pacific Railway Journal*, $3.50.

Here is another reproduction of an old collector's item. In addition to railroad timetables, there are hotel advertisements and a directory of Colorado towns. No rail photos except on cover.

RAILROADS COME TO IOWA, by Wm. J. Petersen, April '60 issue of *The Palimpsest*, published monthly by State Historical Society of Iowa, Iowa City, Iowa, illustrated with photos, maps, old prints, two of them in color, 50 cents.

Good historical account of railroading in the 1850's, for serious fans.

INVESTOR'S READER: Special Railroad Issue, June 8, 1960, illustrated, 40 pages, published by Merrill Lynch, Pierce, Fenner & Smith, Inc., 70 Pine St., New York 5, N. Y., free.

A booklet of timely information about new equipment and techniques that the roads are using to meet competition.

"Last year's hefty (passenger service) deficit of $544 million," it says, "is hopeful only when compared to $610 million in 1958, and a record $724 million loss in 1957. U. S. railroads have not made money on peacetime passenger service since at least 1929."

NOTE TO CIRCUS FANS

Freeman Hubbard is writing a book for boys on the history of the American circus, including its railroad aspects, and wants to hear from anyone who will lend him colored prints or color-photos to illustrate it. No b&w pix needed. Address him in care of *Railroad Magazine*. Write before mailing any circus pix.

FREE AAR BOOKLETS

A 16-page booklet *The Iron Horse Goes to War*, a full-color cartoon narrative of the railroads' role in the Civil War, has just been issued by the Association of American Railroads, Transportation Bldg., Washington 6, D.C., which will send you a copy free on request.

Other new AAR booklets you can get free include *A Review of Railroad Operations* in 1959, by J. Elmer Monroe, vice pres. of AAR and director of Bureau of Railway Economics, 51 pages; *Railroad*, reprinted from *The World Book Encyclopedia*, 20 pages, slick paper, beautifully illustrated in color and b&w; *Salute to the Boy Scouts*, 16 pages, cartoon-style, mostly railroadish; and *A Study of Railway Transportation: Teacher's Manual: Suggested Study Outlines and Source Material*, 7th edition, 50 large pages, slick paper, illustrated.

MEAT CUTTING Offers YOU SUCCESS And SECURITY

In The Best Established Business In The World • PEOPLE MUST EAT!

TRAIN QUICKLY in 8 short weeks for a bright future with security in the vital meat business. Trained meat men needed. Big pay full-time jobs year-round income, no layoffs—HAVE A PROFITABLE MARKET OF YOUR OWN!

LEARN BY DOING AT NATIONAL

Get your training under actual meat market conditions in our big modern cutting and processing rooms and retail department.

PAY AFTER GRADUATION

Come to National for complete 8 weeks course and pay your tuition in easy installments after you graduate. Diploma awarded. Free employment help. Thousands of successful graduates. OUR 37th YEAR!

FREE CATALOG—MAIL COUPON

Send now for big new illustrated National School catalog. See students in training. Read what graduates are doing and earning. See meat you cut and equipment you work with. No obligation. Send coupon in envelope or paste on postal card NOW! G.I. Approved.

NATIONAL SCHOOL OF MEAT CUTTING, INC.
Dept. AD-42 Toledo 4, Ohio

National School of Meat Cutting, Inc.
Dept. AD-42, Toledo 4, Ohio
Send me your FREE School catalog on National Training at Toledo in Meat Cutting, Meat Merchandising and Self Service Meats. No obligation. No salesman will call.
Name.....Age.....
Address.....
City.....State.....
Approved for Veterans

RAILROAD HOBBY CLUB

by SY REICH

A FAMOUS old 3-foot-gage, the East Broad Top, is operating again, and with steam power, a 2-8-2! From Aug. 13 to 21 inclusive a 5-car passenger train will run over 2½ (possibly 3½) miles of track abandoned in 1956 but never torn up, alongside the pretty Aughwick and Black Log creeks. Fare for children 75c, adults $1.50. This project coincides with the Bi-Centennial Celebration of the twin boroughs Rockhill Furnace and Orbisonia.

Sy Reich

If fans adequately support EBT, the train will run regularly on week-ends and may become a permanent operating setup. Contact the road's operating vice president, C. R. Wilburn, at the station and general offices, Rockhill Furnace, Pa. All six narrow-gage steam engines are still on the property. The August runs will be handled by No. 12.

According to Frank Kyper, Wilton, N. H., the reopening of EBT required the reconditioning of coaches No. 14 from the Boston, Revere Beach & Lynn; No. 8, said to be the only narrow-gage passenger car equipped with roller-bearings, and No. 20, formerly President Cleveland's private car. Other equipment on display includes the M-1, the only narrow-gage Brill gas-electric; the M-3, handcars, engines, and items from a slim-gage coal road.

EBT is located in south-central Pennsylvania, with good rail and highway connections and motels in the area. Refreshments, souvenirs and a new illustrated EBT history book are sold in the Rockhill Furnace station.

Tolbert V. Prowell, 304 S. Hanover, Carlisle, Pa.

No. 17 on the narrow-gage East Broad Top before the line was abandoned in 1956.

"YOU ARE UNDER ARREST!"

There's a Thrill in Bringing a Crook to Justice Through Scientific

CRIME DETECTION

We have taught thousands of men and women this exciting, profitable, pleasant profession. Let us teach you, too, in your own home. Prepare yourself in your leisure time to fill a responsible, steady, well-paid position in a very short time and at very small cost. What others have done, you too, can do.

Over 800 of All American Identification Bureaus

Be A FINGER PRINT Expert

employ students or graduates of I.A.S. This fascinating work is easy to learn and the training is inexpensive. You, too, can fit yourself to fill a responsible crime detection job with good pay and steady employment. But don't delay—get the details now. Let us show you how easily and completely we can prepare you for this fascinating work, during spare time in your own home. You may pay as you learn. Write today for free Crime Book.

FREE! "THE BLUE BOOK OF CRIME" It's a thriller. Tells about the most interesting crimes—how they were solved by methods taught by I.A.S. Send now. No salesman will call.

INSTITUTE OF APPLIED SCIENCE
(A Correspondence School Since 1916)
Dept. 300C 1920 Sunnyside Ave. Chicago, Illinois

SEND FOR THIS FREE!

Make money. Know how to break and train horses or ponies. *Write today for this book FREE*, together with special offer of a course in Animal Breeding. If you are interested in Gaiting and Riding the saddle horse, check here ( ). *Do it today—now.*

BEERY SCHOOL OF HORSEMANSHIP
Dept. 8410 Pleasant Hill, Ohio

LEG SUFFERERS

Why continue to suffer without attempting to do something? Write today for New Booklet—"THE LIEPE METHODS FOR HOME USE." It tells about Varicose Ulcers and Open Leg Sores. Liepe Methods used *while you walk*. More than 60 years of success. Praised and endorsed by multitudes.

FREE BOOKLET

LIEPE METHODS, 3250 N. Green Bay Ave., Dept. 31-J Milwaukee 12, Wisconsin

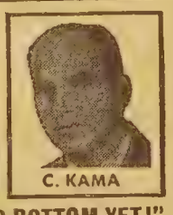
'PSYCHIC DOMINANCE

How to RULE OTHERS with your THOUGHTS." Full course, with stirring exercises. Illus. Adults. Only $3. Sat. or refund. **CLARION**, Box 9309-N, , Chicago 90.

POEMS WANTED

For musical setting . . . send Poems today. Any subject. Immediate consideration. Phonograph records made. **CROWN MUSIC CO., 49 W. 32 St., Studio 747, N.Y. 1**

"I'M MAKING MORE THAN $1000 a Month



C. KAMA

HAVEN'T TOUCHED BOTTOM YET!"

—reports Charles Kama, Texas, one of many who are "cleaning up" with orders for PRESTO. Science's New Midget Miracle Fire Extinguisher. So can YOU!

Amazing *new* kind of fire extinguisher. Tiny "Presto" does job of bulky extinguishers that cost 4 times as much, are 8 times as heavy. Ends fires fast as 2 seconds. Never corrodes. **Guaranteed for 20 years! Over 2 million sold! Sells for only $4.95.**

Show it to civil defense workers, owners of homes, cars, boats, farms, etc., and to stores for re-sale—make good income. H. J. Kerr reports $20 a day. Wm. Wydallis $15.20 an hour. FREE Sales Kit. No obligation.

MERLITE INDUSTRIES, Dept. P-235
PRESTO DIV., 114 East 32 St., New York 16, N.Y.
Canada: Mopa Co., Ltd., 371 Dowd St., Montreal 1, P.Q.

Steam over Manhattan again! Peter Cooper, who built the original *Tom Thumb* in 1830, founded Cooper Union, a tuition-free school in New York, 100 years ago. The B&O loaned this operating relic to the school for its centennial.
David Plowden, 1239 Madison Ave., New York City

Waning Steam Power

Some of the few steam engines still to be seen in Arkansas and Louisiana are listed by Jimmie H. Tatum, 412 W. First St., El Dorado, Ark.:

Lewisville, Ark.: Meriwether Gravel Co. 2-6-0 No. 336 in service; 2-6-0 No. 14 abandoned, rusting away on spur track. No. 336 is ex-Cotton Belt 336. Two-mile line from Cotton Belt connects with gravel-loading tipple.

Warren, Ark.: Warren & Saline River RR. 2-8-0 No. 1702 in service, makes 16-mile run between Warren and Hermitage, Ark., where road connects with the Rock Island. Serves large sawmill at Warren. No. 1702 is ex-U.S. Army 1702.

Reader, Ark.: Reader RR. 2-6-2's Nos. 11 and 108 in service. Engines alternate on 23-mile run between Reader and Waterloo, Ark. Line connects with Missouri Pacific at Reader. Main source of revenue is Waterloo asphalt plant. Operates Mon., Wed., Fri. only.

Prescott, Ark.: Prescott & Northwestern RR. 2-6-2 No. 7 on stand-by duty for road's GE diesel No. 23.

Tallulah, La.: Chicago Mill & Lumber Co., a mill switching operation has Heislers Nos. 5 and 33. Latter is unserviceable and may be scrapped. No. 5 is on stand-by duty for company's diesel.

West Monroe, La.: Olin Mathieson Chemical Corp., large paper-mill switching operation, 0-6-0 No. 5, used full time, and 2-6-2 No. 3, stand-by.

There is no truth to the report that the Nelson & Albermarle in Virginia is still using steam power, we learn from Walt Thayer, Box 1634, Wenatchee, Wash. That line operates a 44-ton GE diesel.

"The only common carrier east of the Mississippi with steam engines in regular road service is Virginia Blue Ridge, operating between Piney River and Tye River, Va., 12 miles," writes F. H. McKenzie, Lovington, Va.

Maine Central steam loco No. 519 was used last June in filming the hit play *Sunrise at Campobello* (see page 8, Aug. *Railroad*) at Eastport, Me., reports F. L. Bradford, 299 Hanover St., Hanover, Mass.

H. L. Kelso, author of "2-10-0's and Their Kin" (page 21) will be interested in an announcement by the (English) *Locomotive Journal* that last March 18 the British Railways shops turned out their final steam locomotive, No. 92220, Class 9, and she is a 2-10-0. The British Railways now have in service 14,231 steam locos, 484 main-line diesels, 1405 diesel switchers, and 90 electrics. The last steam engine built by British Railways is named the *Evening Star*.

Al Jorgensen reports that the Dansville Mount Morris has a 2-6-0 and a 4-6-0 in storage. The NYC O-4-OT is in a scrapyard at Rochester, N. Y. Five, not four NKP 0-8-0's are at Buffalo. They are 278, 285, 291, and 303.

The IC used 4-8-2's, 2-10-2's, and 0-8-2's, and 0-8-0's out of Paducah, Ky., to Princeton, Ky., and Metropolis, Ill., early in 1960. Many other steam locos are stored at Paducah, waiting to be scrapped.

The Georgia Pacific has donated a stream locomotive, now at Toledo, Ore.,

to the Coos-Curry Historical Society. She will be moved to North Bend, Ore.

A permanent exhibit of Civil War railroading, assembled by Leo Myers of St. Louis, is on view at the National Museum of Transport, Barretts Station Rd., St. Louis, Mo. Among its features is a live-steam model of the *General,* which Leo built with 3500 hours of work over a two-year period.

He studied closely and measured the original *General* at Nashville, Tenn. And, being a Civil War buff as well as a railfan, he walked the entire 87-mile path of the wartime chase from Big Shanty (now Kennesaw) to Ringgold, Ga. From the National Archives in Washington, D. C., and from Wm. Knight, Jr., aged son of one of the Andrews raiders of 1862, he got rare photos of the *General* that made possible his working model's authentic detail.

The model, built to scale one inch to the foot, is 43½" long, weighs 85 pounds in working order, and uses 100 pounds of steam to pull a train.

"Colorado Railroad Museum has narrow-gage steam and one Colorado & Southern standard-gage 2-8-0 working five days a week on the Climax spur," enthuses Bob Richardson, proprietor of the Museum, P.O. Box 641, Golden, Colo.

This Museum may well be called a railfans' paradise; it offers so many interesting things to see and do. You should send Bob large, addressed, stamped envelope to learn about the wide variety of railroadiana which may be bought there or through the mail.

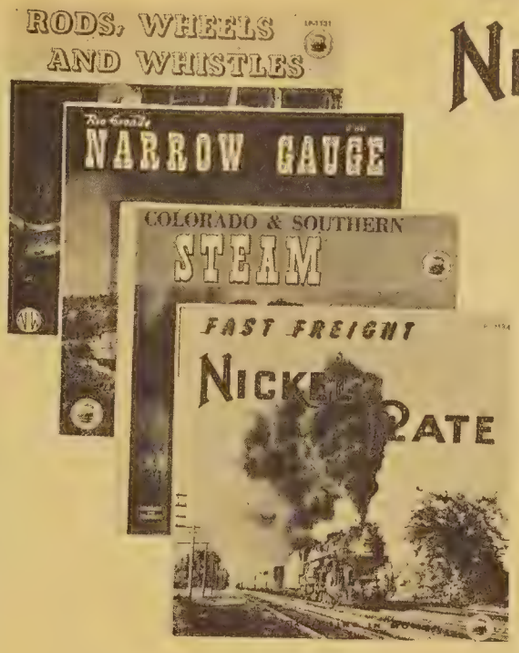
Charles Bailey corrects "Steam Engines on Display" Oct. '59) as follows: At Travel Town, Los Angeles, Oahu Sugar is No. 85, a 4-6-0, not No. 5, an 0-6-2. Sierra No. 3 is stored at Jamestown roundhouse along with two Mikes and a Consolidation.

Dave Ingles tells us that Grand Trunk Western 5030, not 5630, is on display. Pere Marquette 2-8-4's stored at New Buffalo are in poor shape. Santa Fe 4-8-4 No. 2912 is in a trackside park at Pueblo, Colo., behind a protective fence. D&RGW was in Denver for the Centennial celebration but is now back in Gunnison Park.

Chesapeake & Ohio has 2-8-4's, 2-6-6-2-'s, 2-6-6-6's, 2-8-2's, and 0-8-0's as well as a 4-8-4 stored at Russell Yard. Illinois Central has 2-4-4T No. 201 and 0-8-2 No. 3685 in the Markham, Ill., roundhouse. The Essex Terminal has 0-6-0's Nos. 9 and 10 stored in its enginehouse.

FAST FREIGHT

ON THE NICKEL PLATE



NEW!!

12" LP 33⅓ RPM HF

Another in a series of faithful recordings to help you re-live the glorious past of steam railroading.

The Nickel Plate Berkshires at work in Ohio, Penna., and western N. Y. • A Mikado on the Local Freight • A Hudson No. 175 on an NRHS Fan Trip (recordings made behind the tender) • Plus a Special Bonus: Grand Trunk Steam Passenger Trains and DMIR 2-8-8-4 on an Ore Train. $4.95 ppd.

NORTH JERSEY RECORDING ASSOCIATES

P. O. BOX 2 MAPLEWOOD, N. J.

For a delightful ride in the cab of a locomotive, get

"A SYMPHONY IN STEAM"

33⅓ rpm Hi Fi recording, priced at $5.00 each postpaid.

C & V Productions, Dept. R

2524 Meriwether Rd. Shreveport, La.

STEAM & TROLLEY SLIDES

SAINT LOUIS PUBLIC SERVICE—300 items in color and black & white for older St. Louis Transit: United Rwys. Suburban, etc. 178 B&W slides for $32.04: in strips only $24.92. Or ask for list 5-20-60: free to customers, 15c to others.

THIRTY-FIVE SLIDES

Box 2222 Green Mountain Falls, Colo.

USE ZONE NUMBER

When addressing all your correspondence

This Will Insure Prompt Delivery

Steam Locomotives of the Burlington Route

It's here — the fascinating story of C.B.&Q. steam engines in one complete 304-page volume, hardback bound, with 26,000-word text. Over 450 photos — modern, action, old-time. Rosters, engine drawings, colored prints, and maps of the System are included. Letterpress printed on 8½ x 11 glossy paper.

by Bernard G. Corbin & William F. Kerka

$15.00 per copy postpaid

Order your copy direct or from your local dealer.

Steam Locomotives of the Burlington Route

P. O. Box 219 Red Oak, Iowa

FIDDLETOWN & COPPEROPOLIS The Life & Times of an Uncommon Carrier by CARL FALLBERG

ARRIVED AT LONG LAST—A Cartoon Treatment of 19th Century Narrow Gauge Railroading IN BOOK FORM. Most of these originally appeared in Railroad Magazine and many new drawings have been added. Foreword by Lucius Beebe, a New Map of the System, an Up-to-Date Timetable! Hard cover, fullbound maroon, 144 pages, $7.95, add 32c tax in Calif.

HUNGERFORD PRESS

Box 562 Reseda, California

FOREIGN PRODUCTS YOU CAN BUY BELOW WHOLESALE OPEN STARTLING PROFIT FIELD FOR BEGINNERS AT HOME

Get dazzling buys like these at trifling cost abroad and make big profits selling them by mail order or to friends and stores. New Drop Ship Plan starts you now, full or spare time, without product investment or previous experience. Mellinger guides you step-by-step in starting your own Home-Import Business. Puts you in *direct contact* with *original overseas sources*. Shows you *how* to deal direct with suppliers of bargain imports, so profits are all yours. No franchise fee to pay. No catalogs to buy. Send today for FREE details, while Import Boom is at fever pitch. Airmail reaches us overnight.

Dept. C1129, MELLINGER CO., 1717 Westwood, Los Angeles 24, Calif.

17-Jewel $2.87
17¢
$1
Plan shows where you get bargains like these for big profit U.S. sales. Prices shown direct from suppliers abroad. Do NOT Order From Us.
Motorcycle $110
Derringer $5.74
Transistor Radio $3.02
Tailored Suit $17.50

DETECTIVE PROFESSION

Opportunities everywhere for trained investigators, both men & women, private & police. Work home or travel. Send now for free information on easy home study plan, badge, certificate & profitable future. No salesman will call.

PROFESSIONAL INVESTIGATORS
PO 41197-R Los Angeles 41, California

POEMS

WANTED TO BE SET TO MUSIC
FREE EXAMINATION-SEND FOR FREE BOOKLET "YOUR FUTURE IN SONG WRITING"
SONGORAMA 2015 CRESTON AVENUE Studio A10 - N.Y. 53, N.Y.

NEW! ISOTRONIC METHOD

LEARN TV REPAIR *in one short week*

Now, after 5 years research – a *streamlined* training system! Earn up to $150 weekly, in just 7 days. No expensive training, equipment, or long study. Learn to *service* TV sets instead of building them! Most *practical* method yet–developed by leading scientists *with cooperation of major TV mfg.'s!* Send for details and FREE SAMPLE LESSON. Use it on *your* set – repair it! – convince yourself! Write:

FREE! Sample Lesson

TV SERVICING SYSTEMS, Dept. D49
1038 So. La Brea, Los Angeles 19, California

RECTAL ITCHING STOPS!

OR MONEY BACK

CHARTIER'S OINTMENT

Rectal Itching due to Hemorrhoids, Fistula, Piles or any cause stops immediately or MONEY BACK. This formula has been used for 23 years by medical doctors. When itching is relieved, scratching stops and the irritation due to scratching completely clears up or is materially improved. If the itching does not stop immediately your money will be refunded without question. Applied at night assures a comfortable night's sleep and rest; applied in the morning usually assures comfort all day. Chartier's Ointment is colorless and does not stain clothing or linen. Order a prescription size today. $2.00 by return mail postpaid in U.S. and Canada. Send cash, checks or money orders to.

MARVIN COMPANY, Dept. 310
220 W. Broadway, Glendale 4, California

CANADA: Last June the Canadian National was removing its final steam locomotive from service to complete the diselization begun a few years ago.

The Canadian Pacific had the following steam locos in service last April 30:

Atlantic Region: 424, 453, 986, 994, 1044, 1072, 1074, 2209, 2326, 2409, 2459, 2583, 3440, 3442, 3476, 3492, 3514, 3529, 3624, 3642, 5147, 5175, and 5374, operating out of Angus, Aroostock-Shogomoc, Woodstock-Fredericton, Trois Revieres, Farnham-Sherbrooke, Quebec, Kentville, St. Luc, Brownville-Moosehead, Megantic, Brownville, and Bay Shore.

Eastern Region: 136, 1057, 2414, 2839, 2857, all held for special trains during May and June.

Prairie Region: 5441, 5434, 5435, 5439, 5444, 5457, and 5471, at Keewatin and Winnipeg, operating to Broadview and Kenora.

None in Pacific Region.

A number of steam locos are stored dead on both CNR and CPR, as we announced in previous issues.

Bulletin, just out, tells history of Nimpkish Valley Ry., modern steam logging line, plus roster, maps, pix of all locos. Send $1 international postal or express money order (no personal check) to Vancouver Island Ry. Historical Asso., 587 McKenzie Ave., Victoria, B.C., Canada.

Reading Steam Trips

The Reading Company gives the following tentative dates for *Iron Horse Rambles* with steam engine 2124:

Sept. 3: Round trip, Reading to Zionsville, Pa., 112 miles, via East Penn and Perkiomen branches. Speed-pic stops, Zionsville and Klapperthal (horseshoe) Curve; also water stop. Write District Passenger Agent, Reading RR., Reading, Pa.

Sept. 17: Wayne Jct. (Philadelphia) and Jenkintown, Pa., to Bethlehem, Allentown, and return via single-track Perkiomen branch. Speed pic stop at Zionsville. Two-hour stopover at Schwenksville for Penna. Dutch supper for all, while engine takes water. Lv. Wayne Jct. 12:15 p.m. ERT, return 8:20 P.m.

Sept. 24: Norristown, Phoenixville, Pottstown, and Reading, Pa., to Tamaqua. Speed pic stops at Port Clinton and Auburn (on the Schuylkill Valley branch) and two-hour stop in Tamaqua for spectacular show, "American Indian Day," while engine takes water. Lv. Norristown about 9:30 a.m. EDT, return 5:50 p.m.

Oct. 15: Wayne Jct. to West Milton, Pa., via main line and Catawissa branch. Steam engine cut off at Tamaqua en route for two diesels which will take train over Catawissa Mts. No. 2124 runs light to West Milton, picks up train there for return trip. Speed pic stops: (steam) Port Clinton and (diesel) Hazelton Jct. Scenic pic stops at Ringtown and Mainville, both Catawissa branch. (Steam loco barred from Catawissa branch by clearance restrictions.) Lv. Wayne Jct. 7:45 a.m. EDT, return 9:18 p.m.

Oct. 23: Harrisburg, Hershey (famous chocolate town, see page 16), Lebanon, and Reading, Pa., to West Milton. (Otherwise same schedule as on Oct. 15.) Lv. Harrissburg 7 a.m. EDT, return 8:25 p.m.

Write to the Reading's Passenger Dept., Reading Terminal, Philadelphia, Pa., for flyers on these trips as needed. The company is considering a run or two with No. 2124 this coming winter and wants suggestions. Tell them whether or not you think there should be winter trips, and if so, to which points?

Coming Events

Aug. 7: LV Chap. NRHS sponsors Budd RDC tour of LIRR; adults $4.95. Contact G. Salomon, 606 Hamilton St., Allentown, Pa., or E. Kovacs, 416 2nd Ave., Bethlehem, Pa.

Aug. 21: Santa Fe excursion train to Farmers' Fair, Hemet, Calif., sponsored by Pacific RR. Society, Mount Rubidoux Chapter, Box 3157, Del Rosa Station, San Bernardino, Calif.; adults $7.50, kids $3.75, incl. Fair admission. From Colton, $3.50 and $1.75.

Aug. 27-Sept. 5: Caribou County Special, 10-day all-expense rail tour out of San Francisco, 5000 miles of unspoiled wilderness, to Vancouver, Prince George, and Dawson Creek, B.C., then to Hines Creek, Edmonton, Calgary, Banff, and Lake Louise, Alta., returning thru southern B.C. Ride the WP, GN, SP&S, PGE, NAR, and CPR. Fares range from $350 to $440 (less for kids), depending upon train accommodations chosen. Rates include round-trip fare, Pullman if you prefer, meals, hotels, etc. Contact Western Pacific RR., Public Relations Dept., 526 Mission St., San Francisco, Calif.

Labor Day week-end: East Tenn. Chapter is host for NRHS silver anniversary convention at Bristol, Va.-Tenn. Program includes round trip to Kingsport via the Southern and the Clinchfield, powered by ET&WNC 2-8-0; banquet; trip to Appalachia, Va., and Cumberland Gap by Sou. and L&N; and N&W trip to Saltville, Va. Non-members welcomed. Package price for all 3 trips $22; kids half fare. Contact W. Ted Stultz, conv. chairman, 1309 Magnolia Ave., Kingsport, Tenn.

Labor Day week-end: special Burlington-UP steam train, 2000-mile round trip to Ogden over Sherman Hill, Continental Divide, etc., with CB&Q engine 5632 and UP engine 844. Fares from Chicago (coaches) incl. 8 meals, $107.90; from Omaha (coaches), incl. 6 meals, $76.80; from St. Louis (via Burlington, Iowa), incl. 7 meals, $101.60. Send addressed stamped env. to Railroad Club of Chicago, Inc., 55 E. Bellevue Pl., Chicago 11, Illinois.

Labor Day week-end: 1800-mile all-rail trip out of L.A. nearly to Oregon border, sponsored by Pacific Railroad Society, P.O. Box 5279, Metropolitan Station, Los Angeles 55, Calif. Leave L.A. Union Station 9:20 p.m., travel over Santa Fe, WP, GN McCloud River RR., Yreka Western (steam train), and SP. Route includes Feather River Canyon, Lassen National Forest, Shasta National Forest, foothills of Scott Bar Mts., hairpin turns on Cantara Loop, and world's highest double-track bridge. Fares range from $95 to $145 for adults ($75 to $112 for kids), depending upon accommodations you pick.

Sept. 3: Steam round trip to Joliette with CNR 4-8-4 No. 6153, lv. Montreal 8:15 a.m. EST, photo stops, movie runs, $6.50. Write Trip Committee, Canadian RR. Historical Asso., Box 22, Station B, Montreal 2, Canada.

Sept. 4: Round trip to Ottawa, same engine, same sponsor, lv. Montreal 7:15 a.m. EST; photo stops, movie runs, ceremony at Turcot roundhouse for end of CNR steam operation.

Sept. 25: Staten Island trip, CNJ, B&O, SIRT, incl. frt.-only lines; photo stops, baggage car for photogs; bring your lunch; fare $5.50 before Sept. 6; later, $6.50. Encl. stamped addressed env. when writing Trip Committee, Electric Railroaders' Asso., N.Y. Div., 145 Greenwich St., New York City 6.

Collection of Richard Boggiano, 326 Audubon Ave., New York City

The Chicago & Illinois Midland had some good 2-10-2 types. Here is No. 703.

Nearly 800 fans and "rails" greeted No. 6043, a Mountain type, built 1929 by Canadian Loco. Co., Kingston, Ont., as she chugged from The Pas to Winnipeg with train 76, marking end of regularly-scheduled steam power on CNR system.
Canadian National Railways

Sept. 24-25: Trip from San Francisco and Oakland via WP, SP., incl. Quincy RR. steam trip, sponsored by R&LHS, Pac. Coast Chap. Contact Arthur Lloyd, 974 Pleasant Hill Rd., Redwood City, Calif.

Oct. 6: Same chapter plans air and rail trip to visit steam-train operations in Central America and Mexico; lv. San Francisco. Contact A. Lloyd.

Oct. 1: "Rail-O-Ramble" 17-day railfan tour to see Europe's railroads, including very many operating steam engines, will cost $682, starting from New York by B.O.A.C. jet plane. Contact British & Irish Rys., 630 5th Ave., New York City.

Oct. 7-24: Mexico tour out of Los Angeles, $399 up, sponsored by Civil Service Railfans and Finlay Funtime Tours, 11308 Burbank Blvd., North Hollywood, Calif.

Oct. 9: LIRR sponsors Fall Foliage Tour to Oyster Bay, Islip, Smithtown; lv. Penn Station, New York, 9:30 a.m., or Flatbush Ave., Bklyn., 9:32 a.m. Fare, $4.50 (kids $3), includes rail and bus rides, admissions to Coe Estate, etc.

Autumn fantrips being considered by the Railroad Enthusiasts, N.Y. Div., include special Lackawanna train to Oswego; special Pennsy train from Trenton to Belvidere, South Amboy, Manasquan, etc.; CNJ to Green Pond Jct.; a coverage of the Susquehanna; Reading-B&O to visit museum at Baltimore, and a Staten Island tour. No decisions have been reached as we go to press. For details send stamped addressed envelope to secretary, Chas. A. Breen, 435 Chestnut St., Union, N. J.

Random Notes

Who can supply 35mm color slides of Canadian Pacific steam power in British Columbia to Walter F. Pafford, P.O. Box 12, Wilkie, Sask., Canada? He began railroading as a CPR engine wiper, was promoted to fireman, engineer, and then road foreman, and is now an assistant superintendent. For some time he worked out of Revelstroke, B.C. but failed to take color slides there.

S. F. Lowe, who took the pic of a Central of Georgia doubleheader used in our Aug. issue, page 20, is now living at 714 Florence Pl., N.W., Atlanta 18, Ga.

The address of David G. Knox, who made that shot of a logging train on page 38, Aug. issue, is Star Rte., Parkesburg, W. Va. (not Pa.)

The latest issue of "The Steam Chest," a mimeographed 12-page magazine put out by Hi-Ballers Railroad Club, may be obtained free by writing the club's secretary-treasurer, Roger Burrows, 19 E. 47th St., Vancouver, B.C., Canada. Among its interesting material is a PGE roster. Subscription, $3 a year.

The Arcata & Mad River has bought a second-hand GE 44-ton diesel from the Fernwood, Columbia & Gulf and numbered her 104. She replaces an 80-ton Whitcomb and assists two 44-tonners, Nos. 101 and 102.

The Indiana Harbor belt has repainted one locomotive from the traditional olive drab with red and yellow striping (which always struck us as being just about the dirtiest paint scheme on any railroad) to chartruse (the same color green as the New York Central's new boxcars) with red and white striping. The new paint scheme looks good. We hope the other IHB and NYC engines follow suit.

Charles Mizell, Jr., reports that the MKT has rebuilt some of its diesels. An Alco-Ge RS-3 has been rebuilt by EMD. She sports the original Alco trucks, short hood, and cab, but has a somewhat standard GP-type long hood to accommodate the EMD engine. Another Baldwin road switcher was similarly rebuilt. The Texas & Pacific has just received delivery on five new GE18's, numbered 1145-1149.

The Milwaukee Road has removed trains 7 and 8 between the Twin Cities and Sault Ste. Marie and changed the schedules of 3 and 4.

Illini RR. Club of Champaign, Ill., recently bought a Pullman observation car to use on club trips and renamed it Chief Illini, reports Alex Darragh.

The part played by railroads in the development of Illinois is portrayed in a new movie, "The Railroad Story," 16mm color-sound, running time 23 minutes, produced by Illinois RR. Asso. It is available for public showings by educational, civic, business and other groups upon request to Sterling Movies, U.S.A., 100 W. Monroe St., Chicago.

The Burlington has discontinued motor trains 3 and 4 between St. Joseph and Brookfield, Mo., leaving Nos. 56 and 1, between Galesburg and Peoria, Ill., as the only "Q" motors still running. Trains 41 and 44, between Lincoln and Alliance, Neb., were discontinued. Permission has been requested to take off trains 47 and 48, between St. Louis and Rock Island. ●

DECEMBER ISSUE (out Oct. 4)

A third expertly-written feature by ex-fireman H. L. Kelso on engines with ten driving wheels. Plenty of pix.

"The Sun Sets on the Hump Rider," yard service in old days, by Edward Green.

Plus other illustrated articles, a Phila. Suburban Transp. roster, a rail-fiction story, your favorite departments, short hauls, and a DM&IR steam action picture in color, painted by Herb Mott. ●

Be Your Own Art Teacher

IT'S EASIER THAN YOU THINK!

YOU don't have to be a "genius" to break into high-paying art field. Now, through this famous simplified course, quickly and easily learn commercial art, illustrating, cartooning, fashion drawing, TV art, lettering, oil painting, etc. . . . right at home, in your spare time — *all for only 20¢ a day!* No previous art training needed. You start with simple fundamentals — progress rapidly to top-notch work.

2 COMPLETE ARTIST OUTFITS INCLUDED

Earn While You Learn

Instructions are personalized, step-by-step. Soon be your own boss — or earn good money as staff artist for ad agency, newspaper, magazine, store, etc. (Jack Alderman, WSA-trained artist, averages $180 a week!) Many of our students earn while they learn — pay for course before they finish. TWO 22-piece artist outfits given to you *at no extra cost.*

FAMOUS SCHOOL CATALOG IS YOURS FREE

"Art for Pleasure and Profit" fully describes famous low-cost WSA Course, tells about success of students, details opportunities in field today. Send for it NOW. You'll enjoy reading it and proving to yourself that you *can* become a successful artist. No obligation. No salesman will call. **WASHINGTON SCHOOL OF ART, Studio 310, Port Washington, N. Y.** *(Established 1914 — Licensed by N.Y. State Education Department.)*

MAIL NOW FOR FREE CATALOG

Washington School of Art
Studio 310, Port Washington, N. Y.

Send me — FREE — your new 36-page illustrated School Catalog, "Art for Pleasure and Profit." No obligation. No salesman will call on me.

Name.....Age.....
(please print clearly)
Address.....
City.....Zone....State.....

GOVERNMENT OIL LEASES LOW AS $1 PER ACRE

You do no drilling, pay no taxes, may realize a king-size profit without even leaving home. Write for free map and literature.

American Oil Scouts, Dept. AM,
8350 Santa Monica Blvd., Los Angeles 46, Calif.

Ugly Blackheads—Out in Seconds

Keep your complexion free of blackheads —look attractive instantly. Scientifically designed vacuum pump gently "lifts" out ugly blackheads safely. No pinching or squeezing. Try 10 days—if not delighted return for refund. Send $1, plus 10c for postg. and handlg.

BALLCO PRODUCTS CO., Dept. 1
735 East State Street, Westport, Conn.

SELL Advertising Book Matches

FULL OR PART TIME!

No experience needed to earn Big Daily Cash Commission plus premiums for both you and your customers. Be a direct representative of the world's largest exclusive manufacturer of advertising Book Matches. Every business a prospect for new Panorama, Glamour Girls, Hillbillies, safety series and dozens of other styles. All wanted sizes 20, 30, 40 stick matches. Quick daily sales, steady repeat business. New FREE Master Sales Kit makes selling easy. WRITE TODAY for full details.

SUPERIOR MATCH CO.
Dept. L1060 7530 S.Greenwood, Chicago 19

Shrinks Hemorrhoids New Way Without Surgery Stops Itch—Relieves Pain

For the first time science has found a new healing substance with the astonishing ability to shrink hemorrhoids and to relieve pain—without surgery.

In case after case, while gently relieving pain, actual reduction (shrinkage) took place.

Most amazing of all—results were so thorough that sufferers made astonishing statements like "Piles have ceased to be a problem!"

The secret is a new healing substance (Bio-Dyne*)—discovery of a world-famous research institute.

This substance is now available in *suppository* or *ointment form* under the name *Preparation H.** Ask for it at all drug counters—money back guarantee. *Reg. U.S. Pat. Off

Finish HIGH SCHOOL At Home

Free English Assignment

No classes to attend! High school graduates get the better job opportunities... enjoy bigger incomes... lack of high school needn't hold you back any longer. *Now you can get your high school diploma in spare time.* Many complete high school in 2 years. Individual instruction and easy-to-follow lessons speed up your training and avoid wasting time. Take just the approved subjects you need for a diploma. If you have left school and are 17 or over send coupon for catalog and Free Sample Assignment in English Review.

Accredited Member, National Home Study Council

MAIL NOW FOR FREE CATALOG

Wayne School of LaSalle Extension University
A Correspondence Institution
419 So. Dearborn, Dept. 1030W Chicago 5, Ill.
Please send Catalog and Free Sample Assignment in English Review.
Name.....
Address.....
City.....*Zone*.....*State*.....

My name is Charles Atlas. I can't promise you'll win the title of "World's Most Perfectly Developed Man" as I did. But I do believe I can make a powerful He-Man of you--in a very short time. You can prove it to yourself--at my risk. My big free book tells how to do it.

FREE BOOK Mail coupon now for *free* 32-page book. Tells how I can give you "Stand-Out" muscles—how "Dynamic Tension" can make you a new man—confident, popular, successful. Rush coupon to me personally:
CHARLES ATLAS, Dept. 19810, 115 East 23 St., New York 10, N. Y.
In England: Chitty St., London, W. 1

CHARLES ATLAS, Dept. 19810,
115 East 23rd St., New York 10, N. Y.
In England: Chitty Street, London, W. 1

Dear Charles Atlas — Here's the Kind of Body I Want:
(Check as many as you like)

☐ **Broader Chest, Shoulders**
☐ **Slimmer Waist, Hips**
☐ **More Weight, Solid**
☐ **More Powerful Arms, Grip**
☐ **More Powerful Legs**
☐ **Better Energy, Sleep**

Send me, absolutely FREE, a copy of your famous book showing how *"Dynamic Tension"* can make me a new man. 32 pages, crammed with photographs, answers to vital questions, and valuable advice. No obligation.

Name.....Age.....
(Please Print or Write Plainly)
Address.....
City.....Zone...State.....

Milwaukee electric engine E-17 wheels train across river at St. Regis, Montana.
Collection of Philip C. Johnson, 327 Forest Drive, Coeur d'Alene, Idaho

MILWAUKEE ROAD MOTIVE POWER

Roster compiled by Sy Reich

Diesel-Electric Locomotives

Railroad Class	New Road Nos.	Old Road Nos.	HP	Builder	Builder's Model	Wheel Arrngt.	Tract Eff.	Weight	Date	Notes
20F-P6	5A-14A, 11B-14B	5A-12A,21A-22A,11B-12B, 21B-22B	2000	FM-GE	ALT 100.3A	AIA-AIA	56,000	325,000	1946-7	s,m,1
20F-P6	5B-10B	5B-10B	2000	FM-GE	ALT 100.3A	AIA-AIA	56,000	327,000	1946-7	s,m,2
20E-P6	15A,B	15A,B	2000	GM-EMD	E6A	AIA-AIA	53,000	315,000	1941	s,m
20E-P6	16A,B-20A,B	16A,B-20A,B	2000	GM-EMD	E7A	AIA-AIA	54,500	324,000	1946	s,m
16F-F	23A,C-28A,C	23A,C-28A,C	1600	FM	CFA 16-4	B-B	64,000	255,000	1951	m,db
16F-F	23B-28B	23B-28B	1600	FM	CFB 16-4	B-B	63,300	253,000	1951	m,db
24E-P6	30A,C-35A,C	200A,C-205A,C	2400	GM-EMD	E9A	AIA-AIA	56,500	335,000	1956	m,s
24E-P6	30B-35B	200B-205B	2400	GM-EMD	E9B	AIA-AIA	56,500	335,000	1956	m,s
15E-F	48A,C-50A,C	48A,C-50A,C	1500	GM-EMD	F7A	B-B	62,200	249,000	1950	m,db
15E-F	48B-50B	48B-50B	1500	GM-EMD	F7B	B-B	61,800	247,000	1950	m,db
15E-F	60A,C64A,C	90A,C94A,C	1500	GM-EMD	F7A	B-B	61,000	243,000	1950	m,3
15E-F	68A,C-79A,C	68A-C79A,C	1500	GM-EMD	F7A	B-B	58,400	234,000	1950	m,db
15E-F	68B-79B	68B-79B	1500	GM-EMD	F7B	B-B	57,800	231,000	1950	m,db
15E-F	80A,81C	80A,D	1500	GM-EMD	F5A	B-B	58,800	235,000	1949	m,db
15E-F	80B,C	80B,C	1500	GM-EMD	F5B	B-B	56,700	227,000	1949	m,db
15E-F	81A-86A	81A-86A	1500	GM-EMD	F7A	B-B	58,900	236,000	1949	m,db
15E-F	81B-86B	81B-86B	1500	GM-EMD	F7B	B-B	56,700	227,000	1949	m,db
15E-F	87A,C89A,C	87A,C-89A,C	1500	GM-EMD	F7A	B-B	58,700	235,000	1949	m,db
15E-F	87B-89B	87B-89B	1500	GM-EMD	F7B	B-B	57,800	231,000	1949	m,db
15E-P	95A,C-105A,C	95A,C-105A,C	1500	GM-EMD	FP7A	B-B	65,200	261,000	1950-2	m,s
15E-P	95B-105B	95B-105B	1500	GM-EMD	F7B	B-B	62,400	250,000	1950-2	m,s
15E-F	106A,C-121A,C	106A,C121A,C	1500	GM-EMD	F7A	B-B	62,000	248,000	1949-53	m,db
15E-F	106B-121B	106B-121B	1500	GM-EMD	F7B	B-B	56,500	226,000	1949-53	m,db
17.5E-F	125A,C,126A, 127A,C,128A	81C-86C	1750	GM-EMD	F9A F9B	B-B	62,000	248,000	1954	m,db
17.5E-F	125B,126B,C, 127B,128B,C	81D,83D,82D, 84D,86D,85D	1750	GM-EMD			61,300	245,000	1955	m,db
17.5E-RS	200-209	2426-2435	1750	GM-EMD	GP9	B-B	62,800	251,000	1954	m,s
17.5E-RS	210-212	2413-2415	1750	GM-EMD	GP9	B-B	61,500	246,000	1954	m,s
17.5E-RS	215-269	(4)	1750	GM-EMD	GP9	B-B	61,900	248,000	1954-9	m
17.5E-RS	270-277	2436-2443	1750	GM-EMD	GP9	B-B	61,900	248,000	1954	m,db
17.5E-RS	280-331	35A,B,C,D-47A,B,C,D			GP9	B-B	62,200	249,000	1941-5	m,db,5
16F-RS	400-436	2450-2469, 2500-2516	1750	GM-EMD 1600 FM	H16-44	B-B	60,900	244,000	1954,6	m
16A-RS	450-470	2475-2495	1600	Alco-GE, Alco	RS-3	B-B	61,900	248,000	1953-5	m
16A-RS	490-493	976,981,990,996	1500	Alco-GE	RSC-2	AIA-AIA	60,900	243,000	1946-9	m,s,14
15E-RS6	500-523	2200-2223	1500	GM-EMD	SD7	C-C	73,900	296,000	1952-3	m,6
17.5E-RS6	530-543	2224-2237	1750	GM-EMD	SD9	C-C	74,300	297,000	1954	m
16F-RS6	550-555	2125-2130	1600	FM	H16-66	C-C	74,400	298,000	1953	m
16B-RS6	560-567	2100-2107	1600	BLHW	AS-616	C-C	81,900	328,000	1951,3	m
16A-RS6	570-575	2150-2155	1600	Alco-GE	RSD-5	C-C	74,300	297,000	1953	m
16A-RS6	580-586	(7)	1500	Alco-GE	RSC-2	AIA-AIA	41,600	250,000	1946-9	m,s,15
16A-RS6	587-597	978,982-988, 993-995	1500	Alco-GE	RSC-2	AIA-AIA	41,600	250,000	1946-9	m,15
12E-S	600-622	2048-2061, 1637-1645	1200	GM-EMD	SW9	B-B	61,900	248,000	1951,4	m
12E-S	623	1646	1200	GM-EMD	SW7	B-B	61,700	247,000	1950	
12E-S	625-652	2020-2047	1200	GM-EMD	SW9	B-B	62,100	248,000	1951,4	
10E-S	665-672	1647-1654	1000	GM-EMD	NW2	B-B	62,300	249,000	1939,40,7	
24E-T	690A,B-695A,B	2001A,B 2006A,B	2400	GM-EMD	TR4	(B-B)x(B-B)	124,000	494,000	1950,1	

20E-T	696A,B	2000A,B	2000	GM-EMD	TR2	(B-B)x(B-B)	124,000	494,000	1949	
12F-S	700-710	2315-2325	1200	FM	H12-44	B-B	61,600	246,000	1955	m
12F-S	715-744	1833-1847, 2300-2314	1200	FM	H12-44	B-B	62,200	249,000	1951,2 1954	m
12F-S	750-756	1826-1832	1200	FM	H12-44	B-B	61,700	247,000	1950-2	
10F-S	760-783	1802-1825	1000	FM	ALT 100.6A	B-B	61,100	245,000	1944-50	
10A-S	800-819	1873-1887, 1892-1896	1000	Alco-GE	S4	B-B	58,000	232,000	1951 1953-4	m
10A-S	820-839	1670-1674, 1666-1669, 1663-1665, 1657-1662, 1678-1679	1000	Alco-GE	S2	B-B	58,800	235,000	1940,3, 1944,5, 1947, 1949-1951	11
10A-S	840-866	1850-1872, 1888-1891	1000	Alco-GE	S4	B-B	58,800	235,000	1952	
10A-S	870-874	961-963, 1676-1677	1000	Alco-GE	RS-1	B-B	59,700	239,000	1943 1950	s
12B-S	900-914	1910-1916, 1918-1925	1200	BLHW	S-12	B-B	59,300	237,000	1951,4	m
12B-S	920-925	1905-1909,1917	1200	BLHW	S-12	B-B	59,300	237,000	1950,2	
12B-S	926-927	970-971	1200	BLHW	RS-12	B-B	61,200	245,000	1951-2	s
10B-S	928-939	1680-1691	1000	Baldwin	V0	B-B	61,000	244,000	1940,2-5	
10B-S	940-949	1692-1697, 1901-1904	1000	BW	DS 4-4-1000	B-B	57,700	231,000	1948-9	
6E-S	950-953	1616,1617, 1622,1633	600	GM-EMD	SW1	B-B	50,200	201,000	1940	
6E-S	955-957	1618,1619,1627	600	GM-EMD	SW1	B-B	50,400	201,000	1940	
6E-S	960-977	1610-1615,1620-1621,1623-1626, 1628-1632,1634	600	GM-EMD	SW1	B-B	50,700	203,000	1940-1	
6A-S	980-983	1600-1603	600	Alco-GE	S1	B-B	50,100	200,000	1939-40	
6B-S	985	1635	600	Baldwin	V0	B-B	51,000	204,000	1940	
3.8G-S	990-992	1699-1701	380	GE	44 ton	B-B	22,200	89,000	1940-1	12
3.8W-S	993-996	1702-1707	380	Whitcomb	?	B-B	22,200	89,000	1941	9
3.8D-S	997	1708-1709	380	Dav.-Bes.	?	B-B	21,900	87,400	1942	10
?	?	1800-1801	?	?	?	?	?	?	?	13

Electric Locomotive Specifications

DATA ON EXISTING UNITS

Original Road Numbers	HP per unit	No. and type of motors per unit	Railroad Class	Road Numbers	Wheel Arrngt.	Tract Eff.	Weight	Date	Notes
10000	?	?		Scrapped		?	?	1915	15
10050-10053	480	4 GE 255A	ES2	E80-E83	B-B	41,000	164,000	1917,9	16
10100A,B	3000	4 GE 253	EP1	E22	(2-B+B)+(B+B-2)	131,767	652,900	1916	17
10111A,B			EF2	E-38-E40	(2-B+B)+(B+B-2)+(B+B-2)	169,125	864,000	1916-7	
			EF3	E35	(2-B+B)+(B+B)+(B+B-2)	172,750	816,000	1916-7	
			EF5	E32	(2-B+B)+(B+B)+(B+B-2)+(B+B-2)	229,125	1,104,000	1916-7	
			EF5	E25,E30,E33	(2-B+B)+(B+B)+(B+B)+(B+B-2)	232,750	1,056,000	1915-7	
			EF5	E36,E49	(2-B+B)+(2-B+B)+(2-B+B)+(B+B-2)	225,500	1,152,000	1916-7	
10200A,B	3000	4 GE 253	EP1	E23	(2-B+B)+(B+B-2)+(B+B-2)	192,755	973,680	1916	18
10229A,B			EF1	E37	(2-B+B)+(B+B-2)	112,750	576,000	1916	
			EF1	E55,E57	(2-B+B)	56,375	288,000	1916	
			EF2	E31,E42,E47, E52,E54	(2-B+B)+(B+B-2)+(B+B-2)	169,125	864,000	1916	
			EF3	E27,E29	(2-B+B)+(B+B)+(B+B-2)	172,750	816,000	1916	
			EF5	E34	(2-B+B)+(B+B)+(B+B)+(B+B-2)	232,750	1,056,000	1915-7	
			EF5	E45,E50	(2-B+B)+(2-B+B)+(2-B+B)+(B+B-2)	225,500	1,152,000	1916-7	
10250-10254	3200	12 GE 100	EP2	E1-E5	1-B+D+D+B-1	114,450	521,200	1919-20	
10300-10309	3400	6 WH 348	Scrapped		2-C-1+1-C-2	84,000	556,780	1919-20	19
E20-E21	5530	8 GE 750	EF4	E-2A-E21	2-D+D-2	106,700	552,000	1950	
E70-E79	5530	8 GE 750	EF4	E70-E79	2-D+D-2	110,750	586,600	1950	
GV-11	?	?	?	Scrapped	?	?	?	?	20

Electric Locomotive Renumberings

Original Number	Date Built	Subsequent numbers and date renumbered						Present No.	Date Renum.
10000	4-1-15	E85	3-30-39	Scrapped	11-30-39				
10050	5-4-17							E80	3-10-39
10051	6-19-17							E81	3-16-39
10052	5-25-19							E82	3-9-39
10053	7-1-19	E83	3-1-39	Scrapped	1-18-52				
10100A	1-18-16	10230A	6-14-19	10509B	2-27-36			E32B	3-9-39
10100B	1-18-16	10230B	6-14-19	10509C	2-27-36	10230B	4-22-37		
		10507C	6-30-37					E30C	3-13-39
10101A	3-19-16	10231A	5-31-20	E68A	3-10-39	Scrapped	1-10-51		
10101B	3-19-16	10231B	5-31-20	E68B	3-10-39	E48C	10-13-42		
		E68B	11-19-43	Scrapped	1-10-51				
10102A	4-28-16	10232A	1-12-20	E69A	3-22-39	E39C	9-15-41		
		E69A	11-30-43					E39C	3-7-46
10102B	4-28-16	10232B	1-12-20	E69B	3-22-39	E46C	3-27-42		
		E69B	11-30-43					E40C	3-20-46
10103A	4-26-16	10233A	2-29-20	E70A	3-16-39	E48A	10-13-42		
		E70A	11-10-43	E69A	8-18-50			E22A	2-12-53
10103B	4-26-16	10233B	2-29-20	E70B	3-16-39	E48B	10-13-42		
		E70B	11-10-43	E69B	8-18-50			E22B	2-12-53
10104A	6-29-16	10234A	7-27-20	10500C	9-13-32	10234A	5-12-38		
		E73A	3-20-39	E37C	6-6-40			E36C	2-26-60
10104B	6-29-16	10234B	7-27-20	10500A	9-13-32			E25A	3-8-39
10105A	7-17-16	10235A	8-17-20	10501C	9-10-32	E34C	3-16-39		
		E37B	7-15-39	E36C	9-1-39			E35C	2-26-60
10105B	7-17-16	10235B	8-17-20	10502C	9-28-32	E35C	3-7-39		
		E73B	10-16-39					E38C	12-6-41
10106A	10-11-16	10236A	5-31-20	10509A	2-27-36			E32A	3-9-39
10106B	10-11-16	10236B	5-31-20	10500B	9-13-32			E25B	3-8-39
10107A	11-25-16	10237A	4-15-20	10510B	7-16-36			E33B	3-20-39
10107B	11-25-16	10237B	4-15-20	10510A	7-16-36			E33A	3-20-39
10108A	12-21-16	10238A	4-22-20	E71A	3-14-39	E46A	3-27-42		
		E71A	11-18-43					E40A	3-20-46

OPPORTUNITIES FOR EVERYBODY

BUSINESS & MONEY MAKING OPPORTUNITIES (MB, Oct-Nov60)

MAKE $25-$50 week, clipping newspaper items for publishers. Some clippings worth $5 each. Particulars Free. National 81-PB, Knickerbocker Station, New York City.

$3.00 HOURLY POSSIBLE assembling pump lamps Spare Time. Simple, Easy. No canvassing. Write: Ougor, Caldwell 3. Arkansas.

ANALYZE HANDWRITING FOR profit, pleasure. Free Sample lesson, catalog reveals plan. Write IGAS, Inc., Dept. 155, Springfield 4, Missouri.

CANADIAN HOMESTEADS: LAND 50c Acre up. Information Booklet $1. Frontier Surveys, Box 246, Vanderhoof, B.C., Canada.

PROFITABLE HOMEWORK! GUARANTEED Pay!! No Selling. Enterprise, 556 Beacon, Manchester, N.H.

EDUCATIONAL OPPORTUNITIES

FINISH HIGH SCHOOL at home. No classes. Texts furnished. Diploma awarded. If 17 or over and left school, write for Free assignment and catalog. Wayne School of LaSalle Extension University, A Correspondence Institution, Dept. 1060 WAC, 419 S. Dearborn, Chicago 5, Ill.

COMPLETE YOUR HIGH School at home in spare time with 63-year-old school. Texts furnished. No classes. Diploma. Information booklet free. American School, Dept. X718, Drexel at 58th, Chicago 37, Illinois.

LOANS BY MAIL

BORROW $50 to $600 For Any purpose. Employed men and women eligible. Confidential. 2 years to repay. Write for free loan application. American Loan Plan, City National Bldg., Dept. U-8290, Omaha 2, Nebraska.

BORROW BY MAIL. $100-$600. Anywhere. Air Mail Service. Postal Finance, 200 Keeline Building, Department 64-T, Omaha 2, Nebraska.

MUSIC & MUSICAL INSTRUMENTS

POEMS WANTED IMMEDIATELY for Musical Setting and Recording. Free Examination. Rush Poems, Songcrafters, Acklen Station, Nashville, Tennessee.

POEMS WANTED FOR musical setting and recording. Send poems. Free examination. Crown Music, 49-MH West 32, New York.

SONGS WANTED FOR Records And Publication. Free Examination! Cowtown Records, Avery, Texas.

AGENTS & HELP WANTED

BEAUTY DEMONSTRATORS—TO $5.00 hour demonstrating Famous Hollywood Cosmetics, your neighborhood. For free samples, details, write Studio Girl, Dept. 97010C, Glendale, California.

EARN EXTRA MONEY Selling Advertising Book Matches. Free Sample kit furnished. Matchcorp, Dept. GH-100, Chicago 32, Illinois.

BOOKS & PERIODICALS

FREE ILLUSTRATED HYPNOTISM Catalogue. Write: Hypnotist, 8721 Sunset, Hollywood 46W, California.

BIZARRE BOOKERY SUPPLIES unusual books. Catalog 25c. Box 21-D, Brooklyn 30, N.Y.

FOREIGN & U.S.A. JOB LISTINGS

HIGH PAY OVERSEAS, Domestic Jobs. Men, Women. Generous Benefits. Companies Pay Transportation. For information write: World Wide, Dept. N1, 149 N. Franklin St., Hempstead, N.Y.

PERSONAL

MEN! SPECIAL NEW Offers. 25c; Modelcraft, Box 75X, Cliffside Park, N.J.

Free Book on Arthritis And Rheumatism

HOW TO AVOID CRIPPLING DEFORMITIES

Explains why drugs and medicine give only temporary relief and fail to remove the causes; tells all about a specialized non-surgical, non-medical treatment which has proven successful since 1919. Write for this 36-page FREE BOOK today.

BALL CLINIC Dept. 16 Excelsior Springs, Mo.

How to Make Money with Simple Cartoons
A book everyone who likes to draw should have. It is free; no obligation. Simply address
FREE BOOK
CARTOONISTS' EXCHANGE
Dept. 9810 Pleasant Hill, Ohio

GIVE BLOOD

Call your local Red Cross Chapter today

SONGWRITERS

LARGE RECORDING COMPANY WANTS NEW SONGS! Your song may be chosen for recording on ROYALTY BASIS. NATIONAL SALES, PROMOTION, DISTRIBUTION if selected. Send songs, song poems for FREE examination. NO CHARGE FOR MELODIES. MUSIC MAKERS, Dept. AM 29 Box 2507, HOLLYWOOD, CALIF.

MEN PAST 40

Afflicted With Bladder Trouble, Pains in Back, Hips, Legs, Nervousness, Tiredness.

If you have these troubles, particularly bladder trouble, then your condition may be traced to Glandular Inflammation . . . a constitutional disease. Medicines that give temporary relief will not remove the cause of your trouble. Neglect of Glandular Inflammation often leads to premature old age and sometimes incurable malignancy.

The past few years men from over 1,000 communities have been successfully NON-SURGICALLY treated here at Excelsior Springs for Glandular Inflammation. They have found soothing relief and a new outlook in the future of life.

The Excelsior Medical Clinic, an institution devoted exclusively to the treatment of diseases peculiar to older men, has a NEW FREE BOOK that tells how Glandular Inflammation may be corrected by Proven NON-SURGICAL treatments. This FREE BOOK may prove of utmost importance in your life. Write today. **EXCELSIOR MEDICAL CLINIC, Dept. B1040 Excelsior Springs, Mo.**

PROTECT YOURSELF

with this Fountain Pen-Type POCKET

TEAR GAS

DEVICE . . . $15 VALUE
38 Special Cal.

$5.95 Exp. Col.

with 1 shell

Additional shells 50c ea.

For police or civilian defense against robbers, mashers, etc. Causes no permanent injury. Highly polished heavy nickel case with spring-steel pocket clip.

Nickel Plated Peerless Type **HANDCUFFS** $15.00 value; SPECIAL **$7.95** pr. Deluxe leather carrying case $2.50

SEND CHECK OR MONEY ORDER. NO COD's

Registered Colt Distributors Suppliers for Official Police Equipment

PUBLIC SPORTS SHOPS. 11 S. 16th St., Phila. 2, Pa.

This product is not intended for sale in states or localities which have laws forbidding their sale.

Looking for a PUBLISHER?

Your book can be published, promoted, distributed by successful, reliable company noted for prompt, personal service. All subjects. Free Editorial Report. Inquiries also invited from businesses, organizations, churches, etc. Send for Free Booklet. Vantage Press, Dept. R2, 120 W. 31st, N.Y. 1.

LIFE INSURANCE FOR FOLKS 50 TO 75 YEARS

Are you between the age of 50 to 75? If so, then you may still get $500.00 LIFE INSURANCE which will help relieve the money strain on your loved ones in paying final burial and other expenses. You need this insurance NOW! No obligation. No agent will call on you. You can handle this matter entirely by mail. Just print your name clearly on a piece of paper, giving address and your age and mail today. Complete information will be sent to you without obligation; you make up your own mind.

Insurance for Younger Folks, too

ZION BURIAL INSURANCE SOCIETY

Dept. 16K, Rockford, Ill.

10108B	12-21-16	10238B	4-22-20	E71B	3-14-39	E46B	3-27-42	E40B	3-20-46
		E71B	11-18-43						
10109A	5-9-17	10239A	5-5-20	E72A	3-10-39	E39A	9-15-41	E39A	3-7-46
		E72A	11-18-43					E39B	3-7-46
10109B	5-9-17	10239B	5-5-20	E72B	3-10-39	E39B	9-15-41		
		E72B	11-18-43					E30A	3-13-39
10110A	5-12-17	10240A	3-21-20	10507A	9-30-33			E30B	3-13-39
10110B	5-12-17	10240B	3-21-20	10507B	9-30-33			E35A	3-7-39
10111A	5-31-17	10241A	1-30-20	10502A	9-28-32				
10111B	5-31-17	10241B	1-31-20	10502B	9-28-32	E35B	3-7-39	E49C	6-24-43
		E58A	2-20-43					E50A	3-15-39
10200A	11-30-15							E50B	3-15-39
10200B	11-30-15								
10201A	12-1-15	E51A	3-15-39	Scrapped	1-10-51				
10201B	12-1-15	E51B	3-15-39	Scrapped	1-10-51				
10202A	12-7-15	10508C	8-9-35	10202A	2-3-36	10511C	8-28-36	E30D	3-31-53
		E36C	3-2-39	E73B	9-1-39	E35C	10-6-39	E27C	3-20-39
10202B	12-7-15	10506C	8-29-33	10202B	9-10-38	10504C	10-26-38	E29C	3-10-39
10203A	12-18-15	10506C	9-10-38					E33D	5-14-52
10203B	12-18-15	10508C	2-3-36	E31C	2-25-39			E52A	3-27-39
10204A	1-4-16							E52B	3-27-39
10204B	1-4-16							E47C	10-8-42
10205A	1-21-16	E53A	3-23-39					E45C	3-4-42
10205B	1-21-16	E53B	3-23-39					E54A	2-25-39
10206A	2-2-16							E54B	2-25-39
10206B	2-2-16							E55A	3-10-39
10207A	4-7-16							E36D	2-26-60
10207B	4-7-16	E55B	3-10-39	E37D	7-18-51			E23A	8-14-53
10208A	4-8-16	10505A	11-6-36	E28A	3-17-39				
10208B	4-8-16	10510C	7-16-36	10208B	9-1-36	10505B	11-6-36	E23B	8-14-53
		E28B	3-17-39					E23C	5-20-55
10209A	5-6-16	E56A	3-6-39	E36C	3-31-53			E50C	2-16-60
10209B	5-6-16	E56B	3-6-39					E33C	3-20-39
10210A	2-18-16	10505A	2-13-33	10510C	9-1-36			E25D	1-9-51
10210B	2-18-16	10505B	2-13-33	10505C	11-6-36	E28C	3-17-39	E42C	3-31-50
10211A	2-19-16	E57A	3-1-39					E57B	3-1-39
10211B	2-19-16							E35B	2-20-43
10212A	5-24-16	E58A	3-22-39						
10212B	5-24-16	E58B	3-22-39	E41C	9-23-46	Scrapped	6-4-54	E52C	12-29-52
10213A	6-2-16	E59A	2-25-39					E54C	12-29-52
10213B	6-2-16	E59B						E38A	3-1-43
10214A	7-12-16	E60A	3-23-39					E38B	3-1-43
10214B	7-12-16	E60B	3-23-39					E42A	3-31-50
10215A	7-22-16	E61A	2-28-39					E42B	3-31-50
10215B	7-22-16	E61B	2-28-39					E31C	4-30-54
10216A	8-25-16	E62A	3-9-39	E41A	9-23-46				
10216B	8-25-16	E62B	3-7-39	E41B	9-23-46	Scrapped	6-4-54	E47A	10-8-42
10217A	9-11-16	E63A	2-28-39					E47B	10-8-42
10217B	9-11-16	E63B	2-28-39					E32D	2-16-60
10218A	9-15-16	E64A	3-7-39					E50D	2-16-60
10218B	9-15-16	E64B	3-7-39					E45A	3-4-42
10219A	10-23-16	E65A	3-27-39					E45B	3-4-42
10219B	10-23-16	E65B	3-27-39					E49A	6-24-43
10220A	11-1-16	E66A	3-17-39	E38A	12-6-41	E66A	3-1-43	E49B	6-24-43
10220B	11-1-16	E66B	3-17-39	E38B	12-6-41	E66B	3-1-43	E37A	6-6-40
10221A	11-5-16	E67A	3-2-39					E37B	6-6-40
10221B	11-5-16	E67B	3-2-39					E36A	3-2-39
10222A	11-13-16	10511A	8-28-36					E36B	3-2-39
10222B	11-13-16	10511B	8-28-36					E31A	2-25-39
10223A	12-15-16	10508A						E31B	2-25-39
10223B	12-15-16	10508B						E29A	3-10-39
10224A	1-5-17	10506A	8-29-33					E29B	3-10-39
10224B	1-5-17	10506B	8-29-33						
10225A	3-18-17	10504C	3-25-33	10225A	10-26-38	10503C	12-17-38	E34D	7-16-51
		E26C	3-16-39					E34C	7-16-39
10225B	3-13-17	10503C	2-18-33	10225B	12-17-38	E73B	3-30-39	E32C	3-9-39
10226A	6-11-17	10505C	2-15-33	10226A	10-11-36	10509C	4-22-37	E25C	3-8-39
10226B	6-11-17	10507C	9-30-33	10226B	6-30-37	10500C	5-12-38	E49D	5-21-51
10227A	8-18-16	10503A	2-18-33	E26A	3-16-39			E45D	7-24-51
10227B	8-18-16	10503B	2-18-33	E26B	3-16-39			E27A	3-20-39
10228A	9-3-16	10504A	9-25-33					E27B	3-20-39
10228B	9-3-16	10504B						E34A	3-16-39
10229A	11-1-16	10501A	9-10-32					E34B	3-16-39
10229B	11-1-16	10501B	9-10-32					E1	3-2-39
10250	1-27-20							E2	3-6-39
10251	1-11-20							E3	3-3-39
10252	12-15-19							E4	3-2-39
10253	1-13-20							E5	3-2-39
10254	1-27-20								

The following were scrapped on the date in parenthesis: 10300, 12-?-20, E10, 2-21-39 (5-9-55); 10301, 12-26-19, E11, 3-16-39 (4-2-57); 10302, 1-13-20, E12, 3-13-39 (5-14-54); 10303, 2-14-20, E19, 3-30-39 (9-15-42); 10304, 2-17-20, E13, 3-8-39 (7-22-47); 10305, 2-25-20, E14, 3-9-39 (9-25-52); 10306, 3-6-20, E15, 3-13-39 (5-9-55); 10307, 5-15-20, E16, 3-14-39 (5-9-55); 10308, 3-20-20, E17, 3-6-39 (12-19-50); 10309, 5-16-20, E18, 3-14-39 (4-2-57); and GV-11, ?, (3-21-35). Before being scrapped, all of the foregoing units were renumbered.

The following were not renumbered: E20, 12-9-50; E21, 12-21-50; E70, 8-9-50; E71, 8-9-50; E72, 8-9-50; E73, 9-28-50; E74, 10-2-50; E75, 10-14-50; E76, 10-23-50; E77, 10-31-50; E78, 11-9-50, and E79, 11-18-50.

Miscellaneous Notes

Roster compiled from data supplied by Milwaukee Road Public Relations and Adv. Dept. and is accurate as of May 13, 1960.

All electric locomotives were built by General Electric except 10300-10309, built by Westinghouse. Builder of GV-11 is unknown. The individual unit numbers of the following locomotives are suffixed with letters in the order indicated from front to rear: E37A, B; E55A; E57B; E31A, B, C; E38A, B, C; E39A, B, C; E40A, B, C; E42A, B, C; E47A, B, C; E52A, B, C; E54A, B, C; E32A, C, D, B; E25A, C, D, B; E30A, C, D, B; E33A, C, D, B; E34A, C, D, B; E36A, C, D, B; E45A, C, D, B; E49A, C, D, B; E50A, C, D, B; E22A, B; E23A, C, B.

(1) Cab unit. (2) Booster unit.

(3) 90A, B, C, 91A, C, 92A, C, 93B, C, 94A, B are s.

(4) Ex 2402, 2405-2407, 2409, 2400, 2401, 2403, 2404, 2408, 2410-2412, 2416-2425, 2388-2399, 2378-2387, 2368-2377.

(5) FT units rebuilt into GP9's.

(6) 509-511 are s. 520-523 are db.

(7) Ex 975, 977, 979, 980, 989, 991, 992.

(9) 1704 scrapped 3-2-54. No. 1705 sold to Ortner Co., Cincinnati, O., 1-6-60. No. 1707 scrapped 5-1-58.

(10) 1708 scrapped 8-19-58.

(11) 1678-1679 sold to U.S. Government 10-7-42.

(12) 1699 sold to Hyman-Michaels 8-20-41.

(13) 1800-1801 sold to U.S. Government 9-22-44 and 10-7-44 respectively.

(14) Rebuilt to RS-3 with B-B wheel arrangement.

(15) Upgraded to 1600 hp. (16) 10053 scrapped 1-18-52.

(17) 10100B, 10105A are B+B. No. 10101A,B scrapped 1-10-51.

(18) 10202A,B, 10203A,B, 10210A,B 10225A,B, 10226A,B, are B+B. No. 10201A,B scrapped 1-10-51. No. 10212B, 10216B scrapped 6-4-54.

(19) 10300, 10306, 10307 scrapped 5-9-55. No. 10301, 10309 scrapped 4-2-57. No. 10302 scrapped 5-14-54. No. 10303 scrapped 9-15-42. No. 10304 scrapped 7-22-47. No. 10305 scrapped 9-25-52. No. 10308 scrapped 12-19-50.

(20) scrapped 3-21-35.

s equipped with steam heat generator; m equipped with MU controls; db equipped with dynamic brakes.

April 10, 1960: Michigan Railroad Club on a "farewell to steam" fantrip at Richmond, Mich. The engine taking a drink is Grand Trunk Western 4-8-4 No. 6322.
Alfred H. Feldman, 1095 Lenox Ave., Detroit 15, Mich.

THE SWITCH LIST

ALL ENTRIES are printed free, in good faith but without guarantee. Keep within 28 words, including name and address. Use our common abbreviations such as incl. (including), tts (timetables), emp. tts. (employees timetables), and SAS (send 4c stamped envelope for list or information).

Every entry we get will appear in the next available issue; but we work far ahead, so don't be disappointed if yours is not printed immediately.

Se sure to state: (1) Sizes of pix. (2) whether those pix show steam, diesel, or what-have-you, and (3) whether or not a list is available.

Address Sy Reich, Railroad Magazine, 205 East 42nd Street, New York 17, N. Y.

JOE BAK, Jr., 4208 N. Linder, Chicago, Ill., sells railroad and model rr. mags. (SAS)

GEO. BARTH, Box 652, Ft. Eustis, Va., sells plans of pass. cars and locos built 1899-1930. List, sample 25c.

D. W. BEADLE, c/o International Ry. Journal, 30 Church St., New York City, wants frt. and pass. car data, esp. privately-owned, pre-1915 cars, narrow gage, and logging. What have you?

TOM BJORKMAN, 387 Knickerbocker Rd., Tenafly, N. J., sells 1959 DL&W and Erie NY Div. emp. tts. Wants any size good action shot Erie loco 3077.

ELMER BRASWELL, 1581 Melrose Dr., Atlanta, Ga., sells size 5x7 pix Gainesville-Midland, loco Maud, loco 290 Frisco, Sylvania.

JOHN BRINCKMANN, 17 Runyon Ave., Edison, N. J., wants pix Pennsy locos, trains, between Camden and Beach Haven 1886-1935, Tuckerton RR action, right-of-way scenes. (What size pix?)

JOHN BROMLEY, 32 North Dr., Toronto 13, Ont., Canada, sells, trades pix of TTC, MTA, LAMTA, SFMR, NOPSI, DCTS, others. (What size pix?)

STAN BULSIEWICZ, 68 Pinedale Rd., Asheville, N. C., wants R&LHS Bull. 40, CERA Bull. 44, size 116 steam, elec. pix of central NY State.

PAT CARMODY, 4325 Pennlyn Ave., Dayton, O., wants pix, color slides New Haven FCD's, RDC's, MTA subway, PCC cars, trolleys (What size pix?)

EARL CLARK, 825 Taft Rd., Cincinnati 6, O., sells, trades trolley color slides, all over world; also b&w pix, negs. (What size, Earl?) World elec. lines directory, $2.

DON COCKBURN, 561 Gilmour St., Ottawa, Ont., Canada, buys, trades 35mm color slides Canadian trolleys, esp. Western.

RAY COONEY, 1630 Valentines Rd., Westbury, N. Y., wants teen-age pen pal in Phila.-N.Y. area with good knowledge of N. American railroading.

BILL CORBEN, 9325 Walnut, Kansas City, Missouri, will supply free list of GTW, AT&SF engs. scrapped at Kansas City for SAS.

LU CUMMINGS, Jr., 129 Nevin St., Lancaster, Pa., sells pix, size 4x5, p.c., 620, trolleys, rrs. (SAS)

J. OWEN DAVIES, 1214 LaSalle St., Chicago, Ill., buys and sells back issues Railroad Magazine, rr. books, other railroadiana. Big list free. (See book review on page 40.)

ED DAVIS, 2906 26th St., Brewerton, Wash., wants pix Mineral Range 400 series Moguls.

CARL ELLERMAN, Landisburg, Pa., will buy steam negs. or pix RF&P, C&O, broadside or ¾, any size.

HAL ESTUDILLO, 72 Bruce Ave., San Francisco, Calif., buys any size SP steam or diesel negs.

A. W. FRAKES, 3921 4 St., Pt. Arthur, Tex., sells emp. tts. 250 rrs. Trades for those of KCS, L&A, LR&N. (SAS)

CARL GAY, 460 Linden Ave., Winnipeg 5, Canada, sells live-steam shots, over 500 diff., CNR, CPR, some U.S. roads. (SAS) (What size pix?)

BOB GOIN, 153 4 Ave., Paterson, N. J., wants any size negs. Erie steam.

ADOLF GUTOHRLEIN, 5821 Gardenia Ave., Long Beach, Calif., will sell or trade glass plate negs. NYC 2-6-6-2, 2-8-2, 2-6-2, PRR 4-4-0, 4-6-0, B&O 2-8-8-0, 4-6-2.

WADE HALL, 715 N. 70th St., Seattle 3, Wash., will sell one D&RGW lard-oil hand lantern, clear glass globe, complete; also one CR&NY (Alaska) condr.'s receipt holder, with 25 receipts. Make offer.

DAVE HAMLEY, 127 6 St., Aspinwall, Pa., wants info. on any 0-10-0's, 2-10-10-2's, PRR G5a's.

HARVEY HANSEN, 439 14 St., Santa Monica, Calif., buys original color 8mm movies, slides of steam. Wants contacts with LA area railfans.

GRAHAME HARDY, Carson City, Nev., buys and sells old issues Railroad Magazine, other mags., books, wide variety railroadiana. Catalog free.

Wm. HOFFMAN II, 326 S. East Ave., Baltimore, Md., sells size 5x7 steam pix, many roads. (SAS)

E. E. HOSIER, 493 Valley View Dr., Paradise, Calif., buys any size loco or station pix Fall Brook Ry.

GREG JACKSON, 1320 E. Delmar, Springfield,

I'll Send You This Handsome
SAMPLE CASE-FREE

and Show You How to Make Up to $30.00 in a Day

Mail coupon for this Free Tailoring Sample Case packed with 100 beautiful, big-value suit and overcoat fabrics. Take orders from friends, fellow-workers, others, for fine quality, made-to-measure clothes. Pocket big cash profits in advance. Because wearing our suits and overcoats brings more orders, we make it easy for you to get your own clothes without 1c cost. No experience is needed. SATISFACTION GUARANTEED. SEND NO MONEY. Just fill out and mail coupon—today!

PIONEER TAILORING COMPANY, Dept. L-1006
CONGRESS & THROOP STREETS · CHICAGO 7, ILLINOIS

PIONEER TAILORING CO., Dept. L-1006
Congress & Throop Sts., Chicago 7, Ill.

Dear Sir: I WANT A MADE-TO-MEASURE SUIT TO WEAR AND SHOW, without paying 1c for it. Rush details and Sample Kit of actual fabrics, ABSOLUTELY FREE.

NAME _____ AGE _____

ADDRESS _____

CITY _____ STATE _____

HIGH SCHOOL
AT HOME IN SPARE TIME

Low monthly payments include standard text books and instruction. Credit for subjects already completed. Progress as rapidly as your time and abilities permit. DIPLOMA AWARDED.

SEND FOR BOOKLET—TELLS YOU HOW

OUR 63RD YEAR

AMERICAN SCHOOL, Dept. H739
Drexel at 58th, Chicago 37, Illinois

Please send FREE High School booklet.

NAME .....
ADDRESS .....
CITY & STATE .....

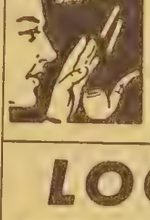
Accredited Member NATIONAL HOME STUDY COUNCIL

HYDRAULIC JACK REPAIRS
Earn While You Learn at Home

Millions of jacks in gas & auto-service stations, truckers, body-shops, riggers, factories, farms need servicing. We show you HOW—easy step by step directions—what tools to use. EARN UP TO $5 an hour, in spare time, in your own basement or garage. Start your own business NOW. Write for folder No. AM9 & free bonus offer.
Institute of Hydraulic Jack Repair
P.O. Box 50 Bloomfield, N. J.

POEMS WANTED for Musical Setting & Recording by AMERICA'S LARGEST SONG STUDIO. Send poems. Free examination.
FIVE STAR MUSIC MASTERS, 620 Beacon, Boston, Mass.

STOP TOBACCO



Banish the craving for tobacco as thousands have with Tobacco Redeemer. Write Today for free booklet telling of injurious effect of tobacco and of a treatment which has relieved over 300,000 people.
In Business Since 1909
THE NEWELL COMPANY
Dept. 616 Chesterfield, Mo.
FREE BOOK

LOOK for Rupture Help

Try a Brooks Patented Air Cushion appliance. This marvelous invention for most forms of reducible rupture is GUARANTEED to bring YOU heavenly comfort and security—day and night—at work and at play—or it costs you NOTHING! Thousands happy. Light, neat-fitting. No hard pads or springs. For men, women, and children. Durable, cheap. Sent on trial to prove it. Not sold in stores. Beware of imitations. Write for Free Book on Rupture, no-risk trial order plan, and Proof of Results. Ready for you NOW!
BROOKS APPLIANCE CO. Dept. 100-C State St., Marshall, Mich.

SEE tiny print **BIG** -- **SEE** far away -- **CLEAR** with quality READING or BIFOCAL glasses. For folks over 40, with no astigmatism or eye disease. Many becoming frames low priced. Send NO MONEY. 30-day TRIAL.

SATISFACTION GUARANTEED • 100,000 SATISFIED CUSTOMERS SINCE 1939

ADVANCE SPECTACLE CO., Inc., Dept. ADV8
537 S. DEARBORN ST., CHICAGO 5, ILL.

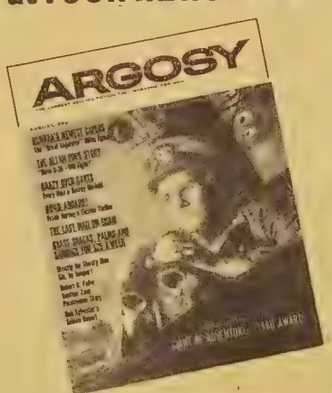
for Action-packed Articles . . .

- ***ARGOSY'S GIANT OF ADVENTURE, 1960:***
  Capt. Edward L. Beach—
  First Man Around The World Underwater!
- ***THE GREAT IMPOSTER STRIKES AGAIN!***
  Further Adventures of America's Fabulous Fraud, Fred Demara
- ***"HAVE B-26—WILL FIGHT!"***
  Allan Pope's Amazing Story

and thrilling fiction

- ***"BOMB ABOARD"***
  Frank Harvey's Gripping Story Torn From Today's Headlines!
- ***"THE STATUE THAT GOOFED!"***
  Continuing the Zany Misadventures of Bob Fuller's Madcap Marines

...BE SURE TO GET the AUGUST ARGOSY ON SALE JULY 19th at YOUR NEWSSTAND



and for more of the same, don't miss the Sept Argosy, on sale Aug 18

Harmon, N. Y.: Steam-cleaning a two-unit passenger diesel includes running gear.
Paul Yurko, 34-18 Broadway, Astoria 6, L. I., N. Y.

Missouri, sells rr. arm patches most big roads.

H. A. JANSEN, 290 Willis Ave., Bronx, N. Y., wants p.c. size pix, various issues of Railroad Magazine, loco rosters.

R. W. JENNINGS, 13 Cliff Ave., Scituate, Mass., sells size 616 pix steam, diesel, elec., on approval.

BERT JOHANSON, 35 Millbrook Dr., E. Hartford, Conn., will sell pix Conn. Co. locos 0809, 2022 or trade for other traction pix.

AL JORDAN, 211 Wineva Ave., Toronto, Ont., Canada, wants Nov. '35, Feb. '33, July '32, Dec. '35, Sept. '43 Railroad Magazine. Sells, trades other back issues.

ARNOLD JOSEPH, 2512 Tratman Ave., New York, N. Y., buys and sells back issues Railroad Magazine, Trains, model mags., other rr. mgs. (SAS)

BOB KENSON, 75 Montvale Ave., Stoneham, Mass., wants any size pix of Bay St., Old Colony and Eastern Mass. St. Ry.

LLOYD KEYSER, 529 Park Lane, Richardson, Tex., wants action shots of CRI&P 5100's. (What size?)

H. M. KNIEFEN, Box 756, Pougnquag, N. Y., sells 3½x5, p.c. size pix locos, equipment, misc., many rrs. List 10c.

KARL KOENIG, 806 Peninsula Ave., Burlingame, Calif., welcomes correspondence and trading on Northwest short lines, logging rrs. Answers all mail.

JIM LANGAN, 2020 Pine Crest Dr., Tyler, Tex., wants track maps of CTS, PTC, MTA subway and surface, all rapid transit lines schedules.

BURT LORING, Rte. 5, Brainerd, Minn., sells p.c. size steam loco pix. (Which roads, Burt?)

KEN MACDONALD, 58 Walker St., Truro, N. S., Canada, buys steam negs., size 616 AC, A&J, CNR, CPR, DAR, ONT, R&S, etc.

WM. MADDOCK, age 26, 54 Phelps St., Lyons, N. Y., wants pen pals in England interested in steam.

DENNIS MANWARREN, 379 Park Blvd., Glen Ellyn, Ill., wants any size pix GTR 2-8-0's, esp. 2612; C&NW class E 4-6-2's. Will sell CA&E whistles or trade for steam loco parts.

JACK MARJORIBANKS, 6607 Cote St. Luc Rd., Montreal, Que., Canada, swaps builders' loco pix.

ART MAYOFF, 1165 Van Horne St., Montreal, Que., Canada, buys sells, trades trolley, subway transfers, tkts., token, pix, p.c.s. Answers all mail.

ROY MELVIN, 21 Middlefield Dr., W. Hartford, Conn., will sell Railroad Magazine, exc. cond., '47-'51, '53. (SAS)

JOE MEYERS, 66 Castleton Rd., Rochester, N. Y., buys, sells, trades negs., pix, all rrs. (SAS) (What size, Joe?)

JOHN MONTVILLE, 2995 Botanical Sq., Bronx, N. Y., will sell railroadiana, over 300 books, mags. (SAS).

L. D. MOORE, Jr., 2102 Parker Ave., Portsmouth, Va., will sell collection of 616 negs., pix locos, trolleys, Railroad Magazine, Trains, ets., etc. List 8c.

ROBT. MORRIS, 8 Sanchez St., San Francisco, Calif., sells action shots SP diesels. (What size, Bob?) List, sample 10c.

TOM MULKINS, 41 Castine St., Bangor, Maine, sells, trades old MKT stock certificates.

TOM MULLAHEY, 933 E. Center St., Mahonoy City, Pa., will sell 205 emp. tts., 40 rulebooks.

MERLIN OLIVE, age 24, 1016 3rd SSt. W., Willmar, Minn., wants pen pals aged 17-25 interested in steam.

LARRY PALMER, 947 Georgetown Rd., Swarthmore, Pa., wants Rdg. sizes 116, 120 steam negs.

AL PATERSON, 451 Maplehurst Ave., Oakville, Ont., Canada, sells action, still pix, size 8x10, CNR, CPR. No list.

DICK PEDLER, 2125 Maffet St., Muskegon, Mich., sells action p.c. size pix steam in Mich. incl. PM, C&O, NYC, AA, Pennsy, GTW, Wab., B&O.

HAROLD PHILLIPS, 13509 Blenheim Rd., Cleveland, O., sells size 3x5, 5x7 pix W. Penn trolleys, Cleveland trolleys, CTS, SHRT.

DAVID PLOWDEN (see front cover), 1239 Madison Ave., New York City, sells photos suitable for framing, mostly steam: CPR, CNR, CV, Syd.&L, NP, GN, Omaha Road (C&NW), B&M, Pennsy, CNJ, DL&W, Rut. Only 3 sizes: 5x7, $1.25; 8x10, $2.50; 11x14, $5.

N. F. PRIEBE, 3721 11th Ave. S., Minneapolis 7, Minn., sells steam pix sizes 5x7, 8x10, GN, C&NW, Milw., DM&IR, other rds. in his state.

H. PROCTOR, Box 48, Muncie, Ind., sells size 116 pix steam, diesel, elec. No list.

CLIFF REDANZ, 67 Rounds Ave., Buffalo, N. Y., sells size 616, larger steam pix. List, sample, 10c.

W. G. RATTLEY, 229 Newbridge St., Menlo Park, Calif., takes size 620 pix frt. cars, all types, on order. Trades for other frt. car pix, any size. Has over 1700 such pix. Fans interested in this hobby, please write.

DAVID SACKS, 277 Arnold Ave., North Plainfield, N. J., will sell for top bids: CNJ hdlight from Camelback 10-wheeler 179, caboose mkr. light, Lackawanna oil lantern 1885 vintage. (SAS)

C. F. SANDERS, 4614 Berkley St., Harrisburg, Pa., wants any calendars with steam pix. Will trade PRR calendars from 1950's.

DICK SCHMELING, 1127 Kansas St., Superior, Neb., sells all size pix UP, CB&Q, Midwest, Western rrs. List free.

AL SHERRY, 5445 Netherland Ave., Riverdale, N. Y., wants builder and number plates from steam locos, esp. N&W, PRR, NYC, B&O.

BEN SMITH, 265 Tompkins Ave., Brooklyn, N. Y., will sell Railroad Magazine '30-'55 Mdl. RRer '34-'54, Mdl. Bldr. '37-'49, Trains '42-'59, RMC '33-'58.

O. J. SNAPP (B&O engr.), 3150 Midvale Dr., Indianapolis, Ind., will sell CI&W emp. tts., tr. orders.

BOB SPRAGG, 1050 Plymouth St., Windsor, Conn., buys, trades, sells 35mm, size 120 color slides CPR, CNR steam, other rrs. List free.

AL STAUFFER, Box 57, LeRoy, O., sells 2 accurate loco drawings that look like photos, size 14x33, thick paper, suitable for framing, NYC 5344 and 999, $1.50 ea., ppd. (Ed. note: they're 2 of the best loco drawings we've ever seen.)

JIM TATUM, 412 W. First, El Dorado, Ark., sells, trades size 116, 120 negs. Ark. and La. industrial and shortline steam.

JOHN-THOMPSON, Hudson Heights, Que., Canada, trades CPR steam loco pix. (What size, John?) Wants info. for book on CPR.

JOE VIRONT, 1315 Western Ave. S. W., Canton, O., sells back issues Railroad Magazine '32-'54. (SAS)

D. VOYTANIC, 3419 W. 65 Pl., Chicago, Ill., will sell CA&E, CRT, CSL trolleyana incl. whistles, gongs, headlikhts, roll signs, etc. (SAS)

ROY WAKE, 1429 W. Congress Pkwy., Chicago, Ill., sells size 3½x5 5x7, 8x10 steam pix AT&SF, BHC, CB&Q, C&NW, C&S, D&RGW, UP. (SAS)

C. A. WAMBOLD, 144 Main St., Souderton, Pa., wants info. on 3-ft.-gage RGS, D&RGW, C&S, Unitah, EBT, ET&WNC, OR&W, etc.

CHAS. WARD, 472 N. Spring St., Elgin, Ill., wants info. and any size pix on Baldwin 1903 LIRR Camelbacks.

CRAIG WEED, Harford Turnpike, Rockville, Conn., will sell '25 Conn. map with all trolleys and steam rrs.

JOHN WEIGHTMAN, Box 696, Sacramento, Calif., will sell '31 WP tt.

MIKE WEINMAN, 497 Westminster Rd., Brooklyn, N. Y., wants info., tts., etc., NYW&B. Sells AF St.-gage trains.

DON WINTERS, 707 W. Mercer Ave., College Park, Ga., trades p.c. size pix and info on Southern shortlines, steam, diesel.

GERALD WOJCIECHOWSKI, 10748 S. Ridgeway, Chicago, Ill., buys, sells, trades switch keys, rule books. Will sell loco classification lamp.

ARTHUR WOOD, 197 Lincoln Ave., Brooklyn, N. Y., makes black and white slides from 120 size rr. negs.

F. H. WORSFOLD, Box 5302 Shepard Sta., Columbus, O., sells back issues Railroad Magazine '47-'54, or Trains, or trade for Western Railroader.

JIM GERTZ, 423 E. 5th St., Port Angeles, Wash., sells Heisler catalogs and 1908 parts books, well illustrated, $5 each., both $8.

MIKE KESSLER, 5916 Adenmoor St., Lakewood, Calif., buys bldr. catalogs, photos, erection drawings, data, etc., of all geared locos; also Loco. Cyclopedias.

KEN HOWIE, 97 Granada Dr., Corte Madera, Calif., will sell Railroad Magazine, nearly all 1935-'47; few MR, Trains. Wants MR, Trains; will swap.

L. A. WHITE, 115 Anndale Dr., Willowdale, Ont., Canada, sells sizes 116, 120 steam pix on approval if you send $1 deposit, refundable.

TALL ORR, Box 66, Dublin, Ga., will buy 1940-'42 issues Trains; state price, cond.

ART ALKERTON, 168 Hatt St., Dundas, Ont., Canada, will sell for top bid steel no. plate off CNR 5289 tender, also CNR emp. tts.

JOHN AARDEMA, 223 Slater St., Paterson, N.J., sells Ygn. annual reports 1909-'58, rr. books, other items. State wants. (SAS)

JOS. FELIX, 208 Pleasant St., Roseville, Calif., sells trolley, bus tokens, transfers, emp. tts., Railroad Magazine, Trains. (SAS)

CHUCK BURNAM, 9710 S. Damen Ave., Chicago, Ill., will sell 1200 ft. tape recording of CB&Q fantrip, 7 model rr. books, 36 model mags., all $25.

G. G. Allen, 317 Griswold St., Glendale, Calif., wants negs., pix of Albuquerque, Tucson, Phoenix streetcars. (What size?)

BOB SHAW, Box 37, Temple, N. H., will sell 22 issues Engineering News & American Ry. Journal, 1900-'01, 45c ea., 3 for $1; lot $4.

GERARD AURAY, 32 London St., Sherbrooke, Que., Canada, will buy various size pix and negs. QC and GT.

DAVID POND, 85 California Dr., Rochester, N.Y., sells, trades, buys b&w (What size?) color negs., b&w , color pix. (SAS)

ROGER BOISVERT, 1150 St. Julie St., Trois Rivieres, Que., Canada, wants any size loco pix CNR 2190, 2192, 2196, 5551-'3, 8209, 8388; CPR 418, 3051, 5404, etc.

SFC Henry Wall, K-3-4 TRS, Ft. Leonard Wood, Mo., buys switch keys or will trade for mimeographed work on lists, etc. Answers all mail.

B. BYRUM, 1511 26th St., Sacramento, Calif., wants any size streetcar pix Sac'to, Fresno, Stockton; Westghse. K10 controllers, crank-handle fareboxes, etc.

HARVEY MacLEOD, 14 Ashton St., Worcester, Mass., sells S&L steam pix, all diff., four 8x10's or 11 5x7's, $1; 15 diff. 3x5's, 75c; plus postage.

GEO. GREGORY, 436 6th St., Traverse City, Mich., will sell Crum's RGS Story (only 1000 copies printed, in '57), perf. cond. (SAS)

HERB KLEINFELDER, 169 Fingerboard Rd., Staten Island 5, N. Y., disposing of 35mm steam slide collection, mosty b&w, some color, some date to 1900, 15 for $1.

HERB CEARLEY, 6716 California Ave., Lng Beach, Calif., will sell size 616 negs.; will trade original color slides. (SAS)

H. C. HARTZELL, 130 S. Prospect Ave., Clarendon Hills, Ill., sells pix (What size?) Pennsy elec., steam, diesel. (SAS)

R. J. BOLAN, 22 Colby St., Haverhill, Mass., buys B&M steam negs. or pix, sizes 616, 120, 5x7.

FRANK LESLIE, 123 Lake Ave., Fair Haven, N.J., wants bldr. plates B&O, Pennsy, N&W, Davenp., Heisler, etc., cash or trade other plates.

JACK GARCIA, 1227 N. Formosa Ave., Los Angeles, Calif., sells LAMTA, PE 5x7's, 8x10's, good detail. List, 5c.

BOB McGAUGHEY, Hardy St., Framingham, Mass., buys NYC, C&O, CNR, CPR, PE tts. Send list. Wants young teen-age pen pal.

J. SHAFER, 4359 Lafayette Rd., Evansdale, Ind., wants rr. pix, old rr. letters, old postcards, catalogs of steam thresher engines, circus items, etc.

CLAYTON KOPPES, Rte. 2, Newton ,Kan., wants pix (What size?), negs., tts., info. on Nevada rrs., Sumpter Val., RGS, Starucca Viaduct.

Model Trading Post

GARY ACKER, 3465 Leighton Rd., Columbus, O., buys HOn3 steam locos, cars, good cond.

AL CHVOSTA, Jr., Rte. 2, Box 165, Hartland, Wis., trades Lionel, AF locos, Strombecker models.

C. K. GIVEN, 2557 S. Parkview Dr., Norristown, Pa., buys, sells, trades HO gage traction.

P. W. HOLTZ, 363 S. Rd., Poughkeepsie, N. Y., will sell custom-bit. HO gage UP 4-8-4. (SAS)

W. D. JOHNSON, 6 Lusk St., Johnson City, N. Y., sells, builds, repairs HO, S, O gage rolling stock and locos.

MARLIN KOCH, 5 Main St., Joliett, Pa., will sell Lionel, AF locos; equip., magazines, catalogs. Wants Lionel 2436, 1947-'48 AF-cats. (SAS)

J. LAUGHLIN, 33R Winthrop St., Rehoboth, Mass., will sell 3½"-gage steam 4-6-2, 4-4-0 locos, cars, track. Pix, details $1, refundable.

BOB LE MASSENA, 1795 S. Sheridan, Denver, Colo., will sell, trade Buddy-L loco, tender, flatcar, caboose, good cond. Wants Lionel 700E.

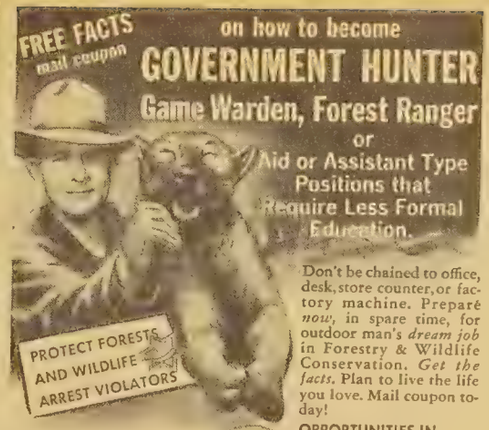
L. D. MOORE, Jr., 2102 Parker Ave., Portsmouth, Va., will trade new HO United Shay for Tenshoda D&RGW mudhen, Mdl. RRer, RMC. (SAS)

ED PETTIT, Box 773, Oakridge, Ore., wants 0 gage scale 70" drivers, machined or cast, for Wab. M-1 or Erie S-4.

JOHN ROUGEAU, 45 Main St., Bridgeboro, N. J., sells Lionel 800 series 0 gage frt. cars, good cond.

BEN SMITH, 265 Tompkins Ave., Brooklyn, N. Y., will sell pre-war frs., Lionel std.-gage, 072 gage, 700EW, 763EW, PRR 0-6-0, etc.

FRED SPURRELL, 4531 Grand St., Everett, Wash., will trade back issues MRRer for certain issues Railroad Magazine or MRRer. Write.



Don't be chained to office, desk, store counter, or factory machine. Prepare *now*, in spare time, for outdoor man's *dream job* in Forestry & Wildlife Conservation. *Get the facts.* Plan to live the life you love. Mail coupon today!

THRILLS & ADVENTURE
Many Forestry & Wildlife men hunt mountain lions – parachute from planes to help marooned animals or save life of injured campers – protect forests – arrest game violators. Adventure, public service, good pay.

OPPORTUNITIES IN YOUR STATE?
We show you how to seek out job openings in your own state and other states Coast to Coast. Age limits 17 to 45, sometimes older on *private* game farms and hunt clubs. We are not connected with the Government.

SECURITY – RETIREMENT – LOW LIVING COSTS
Conservation careers are *permanent.* No layoffs. No worry about your paycheck. Living costs are low, too—and a *government pension* assures good income *for life* when you retire.

MANY START $3000 A YEAR OR MORE
Fine starting pay, with regular advances *established by law.*

HEALTHFUL OUTDOOR LIFE. Hard muscles, bronzed skin and vibrant good health are *extra* rewards of outdoor living. Sleep under the pines. Catch breakfast from icy streams. *Feel and look like a million!*

VACATION JOBS FOR STUDENTS
No experience or preparation needed for vacation jobs in Nat'l. Parks & Forests. America's vacation wonderland. Many accepting Applications *now.* FREE BOOKLET tells how and where to apply.

FREE MAIL COUPON

North American School of Conservation, Dept. D49
810 Dodsworth, Covina, Calif.

• Please rush FREE facts on Forestry & Wildlife opportunities, FREE booklet "Vacations with Pay"– also your FREE "Select-a-Job Chart" details. All postpaid and no obligation to me.

NAME _____ AGE _____
STREET _____
TOWN _____ ZONE ____ STATE ____

Member: Association of Home Study Schools, Washington, D. C.

Want BIG PAY— Your Own Business?
Be a **LOCKSMITH**

You can quickly step into a well-paid job or start a big-profit business of your own. Shortage of locksmiths means opportunity everywhere, spare-time or full-time.

EARN EXTRA MONEY FROM THE START!
All Special Tools, Supplies Furnished Free.
Age, education, minor physical handicaps don't matter in this growing, steady-income trade. You learn fast at home – gain practical experience through well-illustrated lessons. You do real jobs under the personal guidance of experts. Only school of its kind.
For a future as your own boss, or in a big pay job, send for FREE illustrated book No salesman will call. Lic. State of N.J. Accredited Nat'l. Home Study Council.
Approved for Veterans

MAIL COUPON NOW

Locksmithing Institute, Dept. 1209, 150 Park Ave. East Rutherford, N. J.
Please send FREE illustrated book without obligation
Name .....
Address .....
City ..... Zone .... State .....

Invest in Your Future

BUY BONDS TODAY

RUPTURED

BE *FREE* FROM TRUSS SLAVERY

Surely you want to THROW AWAY TRUSSES FOREVER, be rid of Rupture Worries. Then Why put up with wearing a griping, chafing and unsanitary truss. For there is now a new modern Non-Surgical treatment that is designed to permanently correct rupture. These Non-Surgical treatments are so certain, that a Lifetime Certificate of Assurance is given.

Write today for our New FREE Book that gives facts that may save you painful, expensive surgery. Tells how non-surgically you may again work, live, play, love and enjoy life in the manner you desire. Write today—Dept. H1005
Excelsior Medical Clinic, Excelsior Springs, Mo.

Men's Mart

NEW!

THE LATEST STYLE SENSATION

BIKINI BRIEFS and TORSO 'T' SHIRT

In Matching Colors

Continental inspired for style; maximum support and freedom of motion. Made of 100% absorbent combed cotton. The 'T' Shirt is tapered to form fit on your body. Great for casual wear . . . accentuates your muscles. Briefs and 'T' shirt are available in matching colors. Select from White, Red or Black. Sizes: Small, Medium and Large. Bikini Briefs @ $1.35 ea. or 3 for $3.50. Torso "T" @ $2.00 ea. or 3 for $5.50 ppd.

SATISFACTION GUARANTEED

GRAYSON PROD., Inc., Dpt. U-28, 210 Fifth Ave., NYC 10

DRAW ANY PERSON *in one minute!*

NO LESSONS! NO TALENT!

New Amazing Invention—"Magic Art Reproducer." You can draw Your Family, Friends, animals, landscapes, buildings, vases, bowls of fruit, copy photos, comics, designs, maps, anything—Like An Artist Even If You CAN'T DRAW A Straight Line! Anything you want to draw is automatically seen on any sheet of paper thru the "Magic Art Reproducer." Then easily follow the lines of the "Picture Image" with a pencil for an original "Professional looking" drawing. Also reduces or enlarges. Also reproduces actual colors of subject. Free with order "Simple Secrets of Art Tricks of the Trade" booklet. SEND NO MONEY! Free 10-Day Trial! Pay Postman on delivery $1.98 plus postage. Or send only $1.98 with order and we pay postage. Money Back Guarantee.

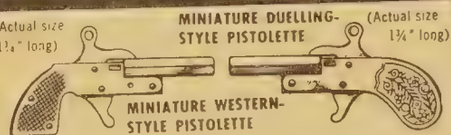
NORTON PRODUCTS, Dept. 405, 296 Broadway, N. Y.

PLEASE CARE

Hunger hurts. $1 sends 22 lbs. to a family overseas. CARE Food Crusade, New York 16.

GREAT GUNS

. . . and they actually work!



Unique imported firearms . . . really go over with a bang! World's tiniest pistols fire exploding, non-projectile cartridges. Sound as loud as .45 cal. gun! Perfect for men . . . the women like them, too. Can be used on key chains, charm bracelets, etc. Furnished with ramrod and 12 cartridges. Extra cartridges available at small cost.

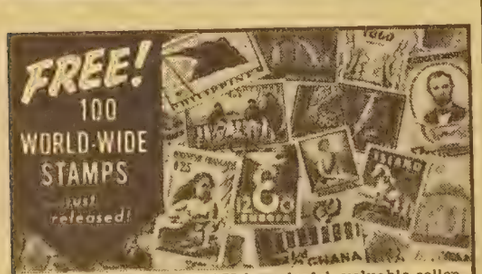
Shipped Pre-Paid, Each $2.95

(SPECIFY DUELLING OR WESTERN STYLE)

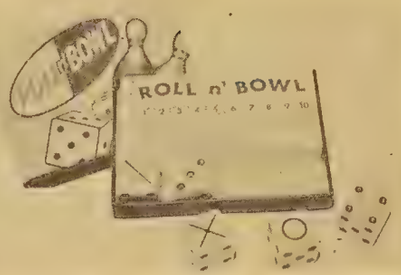
ORDER NOW . . . Send Cash, Check or Money Order to:

IMPORT ASSOCIATES, INC.

2639 W. Petersen • Chicago 45 A.G.

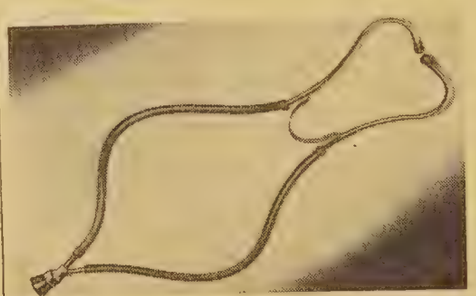


HURRY! SEND TODAY for colorful, valuable collection of 100 World-Wide stamps. Get new issues of past 12 months. From far corners of the world . . . Ghana, Togo, China, Polynesia, India, Australia, Honduras, Iceland and many others. Wonderful new additions to your collection. All different, all genuine, topicals, pictorials bi-colors, mint and used. Limited supply. Only one to a collector. Plus free complete, helpful "Stamp Collector's Guide" and other offers for your FREE inspection. Send name, address, enclose 10¢ for handling and postage. Garcelon Stamp Company, Dept. 8AMX Calais, Maine.



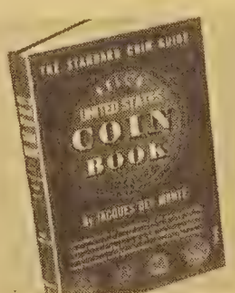
ROLL N' BOWL—A brand new game that you can play anywhere lets you sit in an easy chair and enjoy all the thrills of real bowling. Easy to play, it's 2" x 3". Just roll the dice for strikes, spares, splits or even misses and you're bowling. With instructions for $2 ppd. Terry Elliott Co., Box 1918, Grand Central Station, Dept. RB-32, N.Y. 17.

FOLDING SUNGLASSES with an adjustable vision visor, these Pat Boone sunglasses are cleverly designed to fit into white plastic, pen shaped, carrying case with pocket clip. Compact and light-weight. Green sun filtering lenses in a sturdy metal frame. Smart. Great for the whole family. $1.98 ppd. A. L. Robbins, Desk SG-A, 36 Bowery, N.Y. 13.



EVER try to buy one of these? Hard to find, and usually expensive, this is a U. S. Medical Corps stethoscope. *Brand new*, it's ideal for doctors, engineers and mechanics (to check trouble spots in motors, etc.), educational for kids and adults. Handy in the country. $2.95 ppd. (half-regular price). Banner Co., Dept. 1307A, 49 E. 41st, N.Y. 17.

HONORING THE OLYMPICS, this spectacular, seldom-seen collection includes many, action-packed, genuine foreign postage stamps. All the splendor & pageantry of the Games has been colorfully captured in these hard-to-find issues featuring gymnasts, hurdlers, boxers, swimmers, etc. 10c ppd. H. E. Harris, Dept. R-3, Boston 17, Mass



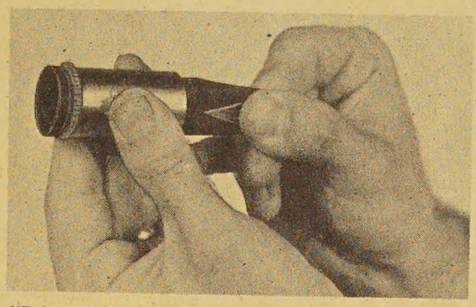
TO COIN A PHRASE—this is a real value! U.S. Coin Book gives up-to-date values on U.S. coins from Colonial times to present. Tells what you should look for and how to collect 'em. You may have a priceless coin right now and not know it. Answer's in this hard-cover book. $2 ppd. Fell Publishers, Dept. AR-6, 386 4th Ave., N. Y.

IMPORTED AIR RIFLE from Europe shoots .177 pellets. The fine people who have rifle, say it's powerful enough to take small game. Made by old world gunsmiths, it has accuracy for target shooting. Hand-rubbed stock. Rifle, $10.95; pellets, 1000 for $3.98. Ppd. Send your order to Empire, Dept. AM, 140 Marbledale Road, Tuckahoe, N.Y.

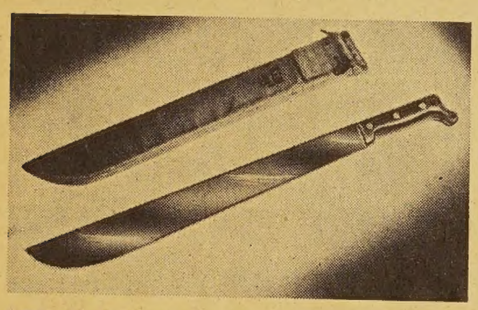
THE insect above, as most of you will recognize, is a Queen Bee, and in the insect world she's unique because *she lives 15 times longer than other bees* and because she lays her own weight in eggs every day. The thing responsible for these feats of longer life and reproduction in the Queen Bee is a food called Royal Jelly made and fed to her by other bees. Used first in cosmetics, Royal Jelly is now available in capsule form. It is used by such as the 80-year-old President of Chile (to keep up a fast pace with his young aides), Sir Edmund Hillary, and others. A month's supply of Lincoln Royal Jelly capsules is now only $4.95 ppd. Lincoln Royal Bee Co., 1306-AB Lincoln Bldg., N.Y. 17.

All products shown here may be obtained directly from indicated sources. Send check or money order with your order. Manufacturer will refund full purchase price on prompt return of unused, non-personalized items. This department is not composed of paid advertising.

LEARN JUDO easily, simply and quickly with book, "Popular Judo," by Pat Butler. An expert, author covers throw, lock, hold, how to ward off attack from the back, and to disarm person with weapon. Includes syllabus of British Judo Association and section on self-defense. Illustrated. $2.50 ppd. From Modern Books, Dept. S-A, Green's Farms, Conn.

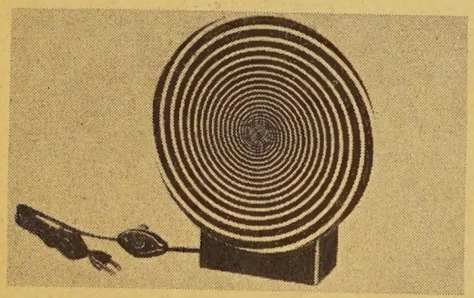


"B-B SHOT", only 2" long, is a new, powerful invention that fires standard, readily available BBs. It is lightweight and pocket size—always ready for target practice or to rout pests. Comes with extra "velocity cone", dispenser, supply of BBs and target for $1.98 ppd. Order from Grayson Company, Dept. A, 210 Fifth Avenue, New York 10, N. Y.



YOU don't have to cross the border to get one of these 18" blade machetes. War surplus (Army made 'em for use in tropics), you can bush out a trail, clear a camp site, or fell a good-size tree with one of 'em. In sturdy green canvas shield with belt clip. $2.95 ppd. Arms & Weapons Dept. A-6, 49 East 41st St., New York 17, N. Y.

AIR MAIL STAMPS collection offers 15 U. S. stamps, many of which are mighty hard to get. A colorful array, all are different. Enhance your collection with Wright Brothers 50th Anniversary, Alexandria and Bi-Centennial among others—even the 80¢ stamp used only for overseas shipments. 25¢ ppd. Garcelon Stamp, Dept. ARA, Calais, Maine.



ELECTRIC hypnotism machine can be used in groups or individually, or for self-hypnosis. Revolves 10" disc at 59 rpm. Complete with disc, set-screw attachment, 8-foot cord, on-off switch, carrying handle and 110 V A.C. motor. Comes with instructions for $14.00 ppd. Order from Hypnotic Aids, Dept. 12-AR, 1133 Broadway, New York 10, N. Y.

SHE GROWS her own hula skirt right before your eyes. She's in her birthday suit when you get her, complete with special green grass wonder seed. A novelty as modern as the 50th state which inspired it, Hula Honey is 8" high. Just watch the grass grow. Fun for $1.98 ppd. House of Figurines, 2611 Tilden Avenue, Dept. AD, Los Angeles, Calif.

Imported from Italy

Famous world'over, this fabulous knife is the most effective weapon one can find for any hunting or fishing emergency. Only takes a flick of the hand to open it for instant action. Locks in open position. Heavy steel blade, bone handle.

STILETTO SAVES MAN'S LIFE:

T. R. Moscow, Idaho, reports: "Wolf freed himself from one of my traps just as I was approaching and attacked me. My gun was lost in the snow and only your fine Stiletto knife saved me from possible serious injury." Choose: Small (5-9/16" open), $4.70. Regular (7-1/16"), $4.95. Mammoth (11"), $7.50. or Colossal (13¼"), $8.95. Send cash, check or M.O. Sorry no COD's. 10-day money back guarantee. Calif. res. add 4% state tax.

SEAPORT TRADERS, INC.
121 S.Grand Ave., Dept. AM-10, Los Angeles 15, Calif.

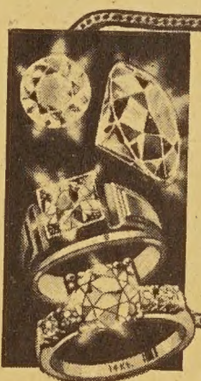
NEW— POCKET SIZE INVENTION HELPS

HYPNOTIZE
YOURSELF or OTHERS
IN MINUTES!
MUST WORK OR MONEY BACK!

Hold the HYPNO-COIN in front of the person you want to hypnotize. Gently vibrate the plastic lense. This sets a whirling hypnotic pattern into motion that is so fascinating, it captures and holds your subject's gaze. Now give your hypnotic suggestions! Get this amazing hypnotic aid complete with a FREE revealing booklet of secrets and instructions that tell you what to say and do, how to command and re-hypnotize with the snap of a finger, how to thrill and amaze them with hypnotic stunts, etc. Get the COIN, Booklet and Stand for Self Hypnosis — only $1.00 ppd. Sent in a plain wrapper. Money back if not delighted!

HYPNOTIC-AIDS • Dept. A36, 1133 Broadway, N.Y.C. 10

$1.00 Name..... Address.....



LOOK! *Amazing Kenya Gems!*
More Brilliant Than Diamonds!

Write today for the ***FREE*** illustrated booklet that tells the full story of these sparkling white Kenya Gems—the glorious jewels that are more dazzling, more fiery than diamonds, and look exactly like fine diamonds. Yes, read all about these marvelous gems—made possible by an exclusive patented formula and crystallized by a secret scientific process.

More Fire! More Brilliance! But Costs Far Less!

The only gem of its kind in the world!

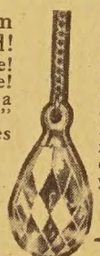
Superbly beautiful! Sparkling White! Truly a miracle of modern science! House Beautiful magazine says, "Like a diamond and with more fiery sparkle." Esquire magazine says, "Outdazzles the most dazzling diamond."

Every Kenya Gem is a clear sparkling WHITE jewel. It is not hazy—not canary—and not yellowish. It is the only known scientific gem that has the sparkling whiteness of a fine diamond. Our free booklet shows actual photographs of Kenya Gems in smartly styled gold mountings.

Send No Money! Write or Mail Coupon for FREE Booklet

KENYA GEM CORPORATION
Dept. 646 , Philadelphia 44, Pa.

©1959 Kenya Gem Corp.



Actually only a small fraction of the cost of a diamond. A large 1-carat Kenya Gem costs only $39, and our free booklet shows distinctive men's rings and stylish ladies' rings, earrings and pendants in any carat size and style of cut you wish. Very easy payments if you like.

Write or Mail Free Coupon Today

KENYA GEM CORPORATION
Dept. 646 , Philadelphia 44, Pa.

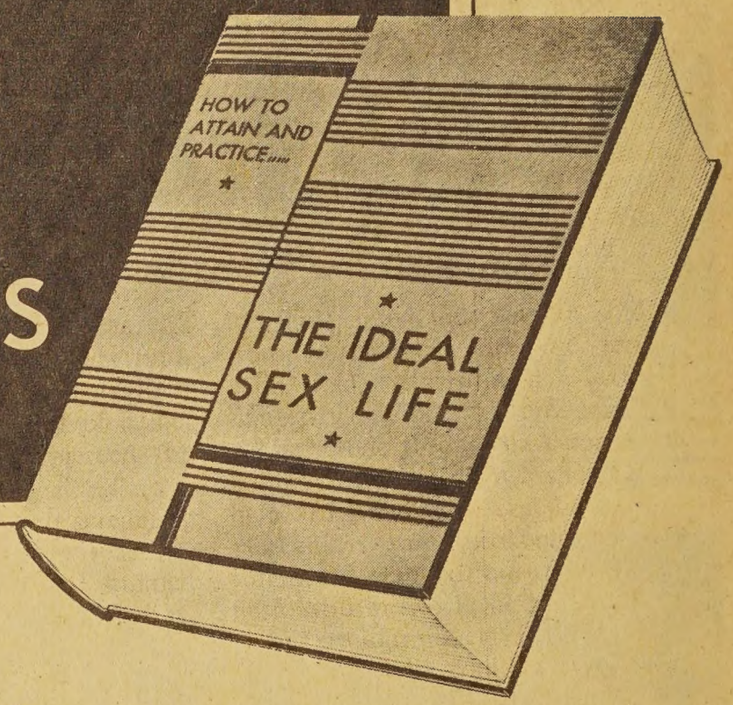
Please send me the FREE illustrated booklet telling all about Kenya Gems.

Name.....
Address.....
City..... Zone..... State.....

Married Happiness Can Last Forever with these

SEX INSTRUCTIONS

For Adults Only



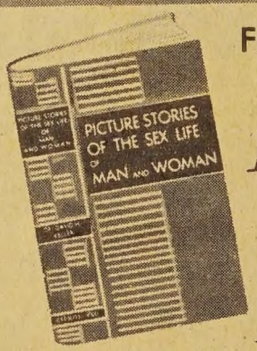
by DR. J. RUTGERS

70 Simply Written Frank Chapters!

Readers of this all-complete book (one of the largest on married sex practice) have learned so much more than they thought possible! Practically every type of married sex problem and every age is individually treated. Shows how to carry out the detailed instructions. Experience the supreme satisfaction of a longer, happier married sex life and abolish the dangers of wrong sex notions. 150,000 illuminating words help establish the necessary desired cooperation between husband and wife. One of the most up-to-date books, the latest improvements, methods, etc., that should be known. This treasure is yours now for only $2.98 (originally $6.00).

Partial Contents of "Ideal Sex Life"

- Modern methods of sex hygiene —for male and female sex organs.
- Latest sex discoveries for improving sexual practice.
- Role of husband and wife in the sex act.
- Reactions of man and woman compared.
- The perfect sex act.
- Step by step plan for wedding night and honeymoon.
- Avoiding harmful mistakes of newlyweds and older married couples.
- "Rejuvenation treatments" for increasing sex potency of man and woman.
- What causes the sexual urge.
- Sex attraction and art of courtship for woman, man.
- Modern art of mutual sex satisfaction.
- Natural birth control.
- Foreign sex practices.
- Attaining Pregnancy.
- Ideal sex techniques and methods for satisfactory sex act.
- Overcoming frigidity in women.
- Preventing dangers of children's sex life.
- Art of love for different ages and types of men and women.
- Advice for aged married people.
- Attaining the greatest satisfaction in sex life.
- 4 kinds of sexual satisfaction.
- Avoiding too much or too little sex life.
- Overcome physical hindrances for ideal sex practice.
- Avoiding dangerous sex relations.
- Degeneracy facts of sex.
- The male and female sex organs.
- Strengthening man's sex virility and sex control towards ideal mutual climax.
- Importance of caresses, embraces for ideal sex life.
- Sources of Disease.
- Sex act regarding change of life, pregnancy.
- The problem of self-satisfaction.
- Sexual Case Histories.
- How to treat abnormal cases.
- Art of choosing a mate for ideal married sex life.
- Plus many more enlightening chapters—every one in simple frank words!



FREE Picture Book

317 Illustrations

YOURS free

With order of "The Ideal Sex Life" we give you FREE "Picture Stories of the Sex Life of Man and Woman." 317 illustrations with detailed explanations of the sexual side of the human body.

- Natural birth control charts.
- Facts to know on bridal night.
- Sex organs illustrated and explained.
- Women's change of life, menstruation.
- Calendar showing days of Fertility—Sterility.
- How sex system of man and woman works.
- The structure of female breasts.
- Pictures how pregnancy takes place.
- How sex vitality is produced in man, woman.
- Unusual cases, and hundreds more...

Read Both Books Without Buying

VALA PUBLISHING CO., Dept. S-252
220 Fifth Avenue, New York 1, N. Y.

Mail me "THE IDEAL SEX LIFE" in plain wrapper marked "personal," with FREE GIFT ($7.00 VALUE COMPLETE). I will pay postman $2.98 plus postage on delivery. If not satisfied within 5 days, I can return books and money will be refunded. I am over 21.

NAME _____

ADDRESS _____

CITY _____ STATE _____

( ) Check here if you desire to save delivery costs by enclosing only $2.98 with coupon under same money back guarantee.
(CANADIAN ORDERS $3.50. NO C.O.D.'s.)

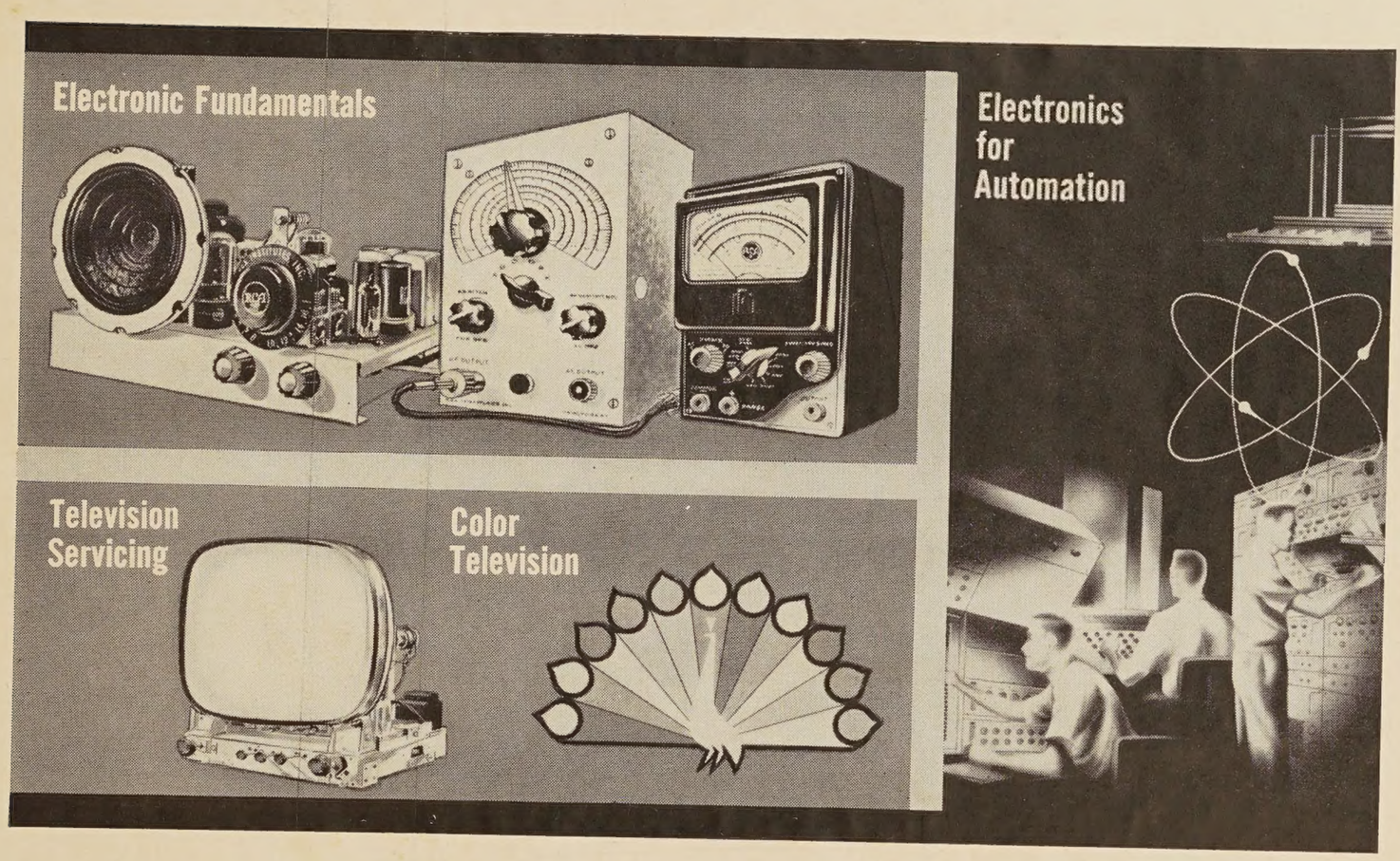
RAILROAD

LET RCA TRAIN YOU IN ELECTRONICS

RCA Institutes, one of the world's leading electronic technical schools, offers a Home Study Course in . . .

ELECTRONICS FOR AUTOMATION

. . . Now you have *four* comprehensive courses for your electronic training . . . from basic electronic theory to the more advanced principles of color TV and Automation.



Send for our 64 page Home Study Catalog

FREE!

RESIDENT SCHOOLS in New York City and Los Angeles offer Technical Institute and Vocational School Courses in Electronics. Day and Evening classes start 4 times each year. Resident School Catalog sent free on request.

Practical work with the very first lesson. Pay-as-you-learn. You need pay for only one study group at a time.

RCA INSTITUTES, Inc. Home Study School, Dept. AM-90
A Service of Radio Corporation of America
350 West Fourth Street, New York 14, N. Y.

Please rush me your FREE illustrated 64-page book "Your Career in Electronics," describing your home training programs. No obligation. No salesman will call.

Name ..... Age .....
Please print

Address .....

City ..... Zone ..... State .....

Veterans: Enter discharge date .....

CANADIANS — Take advantage of these same RCA courses at no additional cost. No postage, no customs, no delay. Send coupon to:
RCA Victor Company, Ltd., 5581 Royalmount Ave., Montreal 9, Quebec
To save time, paste coupon on postcard.

LET ZANE GREY TAKE YOU BACK TO THE *RIP-ROARING* DAYS OF THE OLD WEST!

Take ALL 3 Famous Thrillers By ZANE GREY

for only $2.29

Now Ready! YOUR FIRST 3 VOLUMES

FIGHTING CARAVANS

Screaming Savages! Stampeding Buffalo! Treacherous Outlaws! Buff Belmont fights them all as he leads the wagon trains across the treacherous Plains.

THE MYSTERIOUS RIDER

"Hell-Bent" Wade needs all his courage, daring and six-gun skill when he faces Cap Folsom's cut-throat rustlers in a vicious *fight-to-the-finish!*

TO THE LAST MAN

The turbulent Southwest never had a bloodier feud than the Pleasant Valley War. It was destined to go on and on—*right down to the last man!*

To Introduce You to The Collected Works of ZANE GREY. In Luxurious Matched Volumes of Red, Tan, Blue. Stamped in Genuine Gold.

All the Glory of the Old West — Its Sweeping Action, Color and Romance — Recaptured in Beautiful Volumes Your Family Will Be Proud to Own

IMAGINE! ALL 3 Western thrillers described above are yours *for only $2.29* — to introduce you to the magnificent matched library series of Zane Grey "Golden West De Luxe Editions."

You'll be swept away by the colorful action, the breathtaking thrills, the blood-tingling excitement! You'll come face-to-face with heroic men and women . . . ruthless desperadoes and outlaws . . . the roar of blazing six-guns!

Here are the other riproaring Zane Grey Westerns in this magnificent library series:

RIDERS OF THE PURPLE SAGE. Brave days of old Utah — drenched with blood!

WILDFIRE. Story of a great wild stallion, a fiery girl — and the man who was strong enough to tame them both!

ARIZONA AMES. His blazing six-shooter spread terror among the toughest badmen!

SHADOW ON THE TRAIL. Quick-shooting Wade Holden fights with rawhide-tough rustlers.

ROGUE RIVER FEUD. Violence and death on Rogue River.

DESERT GOLD. Spine-tingling adventures of men and women crazed by the lure of riches.

WEST OF THE PECOS. A hard-riding, straight-shooting young man turns out to be a *girl!*

THE LIGHT OF WESTERN STARS. Mighty epic of warfare on the border!

CALL OF THE CANYON. Smashing drama of death and danger!

30,000 ON THE HOOF. Pioneer Huett battles screaming Indians and lawless rustlers.

WILD HORSE MESA. A party sets out to capture a phantom stallion.

Other volumes include: The Vanishing American; Fugitive Trail; The Hash Knife Outfit; The Arizona Clan; Twin Sombreros; The Heritage of The Desert; Western Union; Under The Tonto Rim; Shepherd of Guadaloupe; Thunder Mountain; The Thundering Herd; The Man of The Forest. Every one is complete — not a thrilling word is cut!

SEND NO MONEY

Just mail RESERVATION CERTIFICATE to examine your first three volumes, shown and described above. With them will come an introductory invoice for only $2.29, plus a few cents mailing charge, as payment IN FULL for ALL THREE books, and instructions on how to get your other beautiful volumes. If not fully satisfied, you may return all three introductory books, or any later volume in the series; you may cancel your reservation at any time.

There are positively no other charges. No "fee"; no "deposit" in advance. First come, first served. Send Reservation Certificate NOW.

WALTER J. BLACK, INC., Roslyn, L.I., N. Y.

READER'S RESERVATION CERTIFICATE

WALTER J. BLACK, Inc. LN
Roslyn, L.I., New York

Please reserve in my name the books listed in your generous offer to readers of this publication—the 27 luxuriously bound "Golden West De Luxe Editions" of Zane Grey. Send me at once my three introductory volumes: FIGHTING CARAVANS, THE MYSTERIOUS RIDER and TO THE LAST MAN. I ENCLOSE NO MONEY IN ADVANCE, but within one week I will send you only $2.29 (plus a few cents mailing charge) as complete payment for ALL THREE books — and I will be entitled to receive each following handsome De Luxe volume as it comes from the press, at the low $2.29 price plus a few pennies for mailing, sending no money in advance. If not completely satisfied, I may return all three introductory books, or any book which follows, within one week of receipt. I may cancel my reservation at any time. (*Books shipped in U.S.A. only.*)

Name.....
(Please Print Plainly)

Address.....

City.....Zone....State.....